

100401

Vol. I.
TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1922.

No. 93.

WEBSTER ELECTRIC COMPANY, PETITIONER,

vs.

SPLITDORF ELECTRICAL COMPANY.

**WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE SEVENTH CIRCUIT.**

PETITION FOR CERTIORARI FILED JULY 31, 1922.

CERTIORARI AND RETURN FILED DECEMBER 13, 1922.

(29,070)



(29,070)

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INDEX.

| | Page. |
|--|-------|
| Record from U. S. district court for the northern district of Illinois.... | 1 |
| Bill of complaint..... | 1 |
| Exhibit A to Bill of Complaint—License agreement between T. E. Podlesak et al. and Webster Mfg. Co., November 2, 1908. | 39 |
| Exhibit B to Bill of Complaint—Agreement between H. J. Pod- lesak and Emil Podlesak, August 17, 1912..... | 44 |
| Exhibit C to Bill of Complaint—License agreement between Emil Podlesak et al. and Webster Electric Co., February 5, 1914 | 48 |
| Exhibit D to Bill of Complaint—License agreement between Emil Podlesak et al. and Webster Electric Co., February 5, 1914 | 52 |
| Exhibit E to Bill of Complaint—Supplemental agreement be- tween Emil Podlesak et al. and Webster Electric Co., January 20, 1915..... | 57 |
| Exhibit F to Bill of Complaint—Memorandum of agreement be- tween Emil Podlesak et al. and Splitdorf Electric Co., Sep- tember 4, 1915..... | 60 |

| | Page. |
|--|-------|
| Exhibit G to Bill of Complaint..... | 66 |
| Letter, April 8, 1915, Webster Electric Co. to H. J. Podlesak..... | 66 |
| Letter, April 24, 1915, H. J. Podlesak to Webster Electric Co. | 68 |
| Letter, July 17, 1915, H. J. Podlesak to Webster Electric Co. | 69 |
| Letter, July 27, 1915, Webster Electric Co. to H. J. Podlesak..... | 70 |
| Letter, August 7, 1915, H. J. Podlesak to Webster Electric Co. | 71 |
| Letter, September 7, 1915, Webster Electric Co. to H. J. Podlesak | 73 |
| Letter, September 9, 1915, Podlesak & Podlesak to Webster Electric Co..... | 73 |
| Letter, September 14, 1915, Webster Electric Co. to Podlesak & Podlesak..... | 74 |
| Letter, September 25, 1915, H. J. Podlesak to Webster Electric Co..... | 75 |
| Amendment to bill of complaint..... | 80 |
| Joint and several answer of Splitdorf Elec. Co. and Sumter Elec. Co. | 81 |
| Exhibit No. 1 to Joint Answer—Letter, Webster Elec. Co. to H. R. Van Deventer, January 2, 1914..... | 99 |
| Separate answer of Henry Joseph Podlesak..... | 100 |
| Separate answer of Tesla Emil Podlesak..... | 125 |
| Defendant's Exhibit No. 1—Contract letter, dated August 19, 1909, Hertz Electric Co. to Emil Podlesak..... | 163 |
| Defendant's Exhibit No. 2—Contract letter, dated May 19, 1910, Webster Electric Co. to Emil Podlesak..... | 164 |
| Defendant's Exhibit No. 3—Memorandum of agreement made March 3, 1913, between the Webster Electric Co. and Emil Podlesak..... | 165 |
| Defendant's Exhibit No. 4—Schedule showing the history of each Podlesak patent, the name of the inventor and patentee, character of device, etc..... | 168 |
| Amendment to answer of Sumter Electrical Co. and Splitdorf Electric Co..... | 169 |
| Interrogatories filed by Sumter Electrical Co. and Splitdorf Electric Co..... | 170 |
| Answers of S. A. Loeb, secretary of the Webster Electric Co., to the interrogatories filed by the corporation defendants..... | 171 |
| Amendment to answer to Splitdorf Electrical Co..... | 174 |
| Plaintiff's answer to the amendment in the nature of a cross bill to the answer of Splitdorf Electrical Co..... | 180 |
| Original bill of Webster Electric Co. in the nature of a supplemental bill | 184 |
| Answer of Splitdorf Electrical Co. to the "original bill in the nature of a supplemental bill"..... | 198 |
| Answer of Henry Joseph Podlesak to the supplemental bill..... | 207 |
| Answer of Tesla Emil Podlesak to the "original bill in the nature of a supplemental bill"..... | 210 |
| Amendment to answer of Splitdorf Electrical Co..... | 215 |
| Stipulation as to certain facts..... | 218 |

| | |
|--|-----|
| Assignment, dated February 1, 1916, Sumter Electrical Co. to Splitdorf Electrical Co..... | 218 |
| Memorandum of agreement between Emil Podlesak and Henry Joseph Podlesak and Splitdorf Electrical Co. et al., dated November 3, 1915..... | 220 |
| Statement of evidence..... | 224 |
| Testimony of Edward H. Kimbark..... | 224 |
| H. A. Waterman..... | 228 |
| William L. Carle..... | 240 |
| Edmund J. Kane..... | 240 |
| H. A. Waterman (recalled)..... | 262 |
| Edmund J. Kane (recalled)..... | 294 |
| Maurice Kane..... | 295 |
| James A. Munn..... | 318 |
| Ernest Bruce..... | 337 |
| Arthur C. Kleckner..... | 339 |
| Towner K. Webster..... | 340 |
| Henry J. Podlesak..... | 397 |
| H. R. Vandeverter..... | 398 |
| Emil Podlesak..... | 411 |
| Charles Kratsch..... | 416 |
| Harry G. Webster..... | 426 |
| Frederic A. Fischel..... | 435 |
| Memorandum of agreement between T. E. Podlesak and Webster Elec. Co., January 15, 1918..... | 443 |
| Testimony of Harry G. Webster (recalled)..... | 448 |
| Sidney A. Loeb..... | 473 |
| A. C. Kleckner..... | 475 |
| H. R. Vandeverter (recalled)..... | 476 |
| H. G. Webster (recalled)..... | 477 |
| F. C. Manning..... | 478 |
| E. J. Kane..... | 498 |
| H. R. Van Deventer..... | 499 |
| George H. Peaks..... | 506 |
| John Lewis Milton..... | 508 |
| George Miles Merwin..... | 538 |
| John Lewis Milton (recalled)..... | 545 |
| Albert C. McCarthy..... | 615 |
| John Lewis Milton (recalled)..... | 620 |
| William August Kroeplin..... | 679 |
| John Cran Anderson..... | 683 |
| H. J. Podlesak (recalled)..... | 685 |
| John J. Milton (recalled)..... | 686 |
| Towner K. Webster (recalled)..... | 687 |
| Henry W. Carter..... | 688 |
| Henry G. Cox..... | 713 |
| Henry W. Carter (recalled)..... | 721 |
| H. R. Van Deventer (recalled)..... | 735 |
| Offers in evidence..... | 738 |
| Testimony of Henry J. Podlesak (recalled)..... | 740 |

| | Page. |
|--|-------|
| Testimony of John Lewis Milton (recalled)..... | 742 |
| H. G. Webster..... | 743 |
| E. J. Kane..... | 789 |
| A. C. Kleckner (recalled)..... | 792 |
| Statement by Mr. Williams..... | 793 |
| Stipulation and order settling statement of evidence..... | 795 |
| Opinion, Sanborn, J..... | 795 |
| Decree..... | 807 |
| Petition for appeal..... | 811 |
| Assignment of errors..... | 811 |
| Order allowing appeal and supersedeas..... | 815 |
| Cost bond on appeal..... | 815 |
| Supersedeas bond..... | 816 |
| Stipulation for addition to record..... | 818 |
| Orders extending time..... | 818 |
| Precept for transcript of record..... | 820 |
| Stipulation as to transcript of record and exhibits..... | 821 |
| Clerk's certificate..... | 821 |
| Citation and service..... | 822 |
| Clerk's certificate, C. C. A..... | 822 |
| Caption and appearance..... | 823 |
| Stipulation for addition to record..... | 826 |
| Order of district court extending time..... | 827 |
| Order allowing addition to record..... | 828 |
| Appearances..... | 829 |
| Order setting cause for hearing..... | 832 |
| Argument and submission..... | 834 |
| Opinion, Evans, J..... | 835 |
| Decree..... | 845 |
| Motion for oral argument on petition for rehearing with notice..... | 846 |
| Appellee's petition and argument for rehearing..... | 851 |
| Answer to petition for rehearing..... | 861 |
| Reply to answer to petition for rehearing with notice..... | 863 |
| Order resetting case for oral argument..... | 916 |
| Reargument and submission..... | 917 |
| Opinion on rehearing, Evans, J..... | 918 |
| Decree on rehearing..... | 926 |
| Clerk's certificate..... | 927 |
| Plaintiff's Exhibit No. 1—Letter, March 15, 1909, International Harvester Co. to experimental department.... | 1 |
| No. 2—Letter, April 29, 1909, Webster to International Harvester Co.—Attention of A. E. Mayer..... | 2 |
| No. 3—Letter, March 17, 1909, International Harvester Co. to E. H. Kimbark..... | 3 |
| No. 4—Letter, June 11, 1909, International Harvester Co. to experimental department.... | 3 |
| No. 5—Photograph..... | 5 |
| No. 6—Decision recording change in design or material..... | 7 |

INDEX.

V

Page.

| | |
|--|----|
| Plaintiff's Exhibit No. 7—Letter, June 3, 1909, Webster Mfg. Co. to Cavanagh | 7 |
| No. 8—Extract from report of meeting No. 176, May 20, 1909, in re Milton magneto..... | 8 |
| No. 9—Letter, May 26, 1909, International Harvester Co. to Cavanaugh..... | 8 |
| No. 10—Letter, May 6, 1909, Kimark to Mayer..... | 9 |
| No. 13 and Kane's Exhibit No. 1—Pamphlet illustrating link type machine of 1909..... | 11 |
| No. 16 and Kane's Exhibit No. 2—Pamphlet illustrating self contained construction of 1909.... | 15 |
| Kane's Exhibit No. 7—Drawing of April 11, 1909.... | 27 |
| No. 18 and Kane's Exhibit No. 5—Kane's Manila paper drawing..... | 29 |
| No. 42—Record in case of Emil Podlesak et al. vs. Sumter Electrical Co. in U. S. district court, eastern district of South Carolina... | 31 |
| Bill of complaint..... | 31 |
| Subpoena ad respondendum..... | 36 |
| Return on service of writ..... | 37 |
| Notice | 38 |
| Order extending time for defendant to answer.. | 38 |
| Return on service of writ..... | 39 |
| Petition for order extending time to answer.... | 39 |
| Assignment from Emil Podlesak and Henry Joseph Podlesak to Webster Electric Co., dated September 4, 1915..... | 41 |
| Order of discontinuance..... | 46 |
| Certificate of clerk..... | 47 |
| No. 46a—Oscillogram of current curve plaintiff's device | 49 |
| No. 49—Defendant's device, type A, front diagram.. | 51 |
| No. 50—Defendant's device, type B, front diagram.. | 53 |
| No. 51—Defendant's device, type C, front diagram.. | 55 |
| No. 52—Defendant's device, type B, side perspective. | 57 |
| No. 53—Engine cycle..... | 59 |
| No. 56—Defendant's device, type A, right side..... | 61 |
| No. 57—E. J. Kane's device, top view..... | 63 |
| No. 57a—E. J. Kane's device, side view..... | 65 |
| No. 59—Record in case of Emil Podlesak et al. vs. Alamo Mfg. Co. in U. S. district court, eastern district of Michigan, southern division. | 67 |
| Answer of Emil Podlesak to certain of defendant's interrogatories..... | 67 |
| Certificate of clerk..... | 68 |
| Amended bill of complaint..... | 69 |
| Certificate of clerk..... | 74 |
| Motion to dismiss..... | 75 |
| Certificate of clerk..... | 76 |
| Motion to amend answer..... | 77 |

| | Page. |
|--|-------|
| Plaintiff's Exhibit No. 59—Certificate of clerk..... | 78 |
| Order granting defendant's motion for leave to amend answer..... | 79 |
| Certificate of clerk..... | 80 |
| Motion to take a deposition..... | 80 |
| Affidavit of Lynn A. Williams..... | 81 |
| Certificate of clerk..... | 82 |
| Order granting motion to take a deposition..... | 83 |
| Certificate of clerk..... | 84 |
| Deposition of Henry J. Podlesak..... | 84 |
| Notary's certificate..... | 88 |
| Summons | 89 |
| Certificate of clerk..... | 90 |
| Motion for an order dropping the case from the trial calendar..... | 90 |
| Affidavit of Robert M. See..... | 91 |
| Certificate of clerk..... | 92 |
| Final decree..... | 93 |
| Certificate of clerk..... | 94 |
| No. 60—Affidavit of Lynn A. Williams..... | 95 |
| Exhibit A—Telegram, December 2, 1915, Sumter Electrical Co. to Williams..... | 96 |
| Exhibit B—Telegram, December 2, 1915, John F. Alvord to Williams..... | 96 |
| Exhibit C—Letter, December 2, 1915, Sumter Electrical Co. to Williams..... | 97 |
| Exhibit D—Telegram, December 2, 1915, Sumter Electrical Co. to Williams..... | 97 |
| Exhibit E—Letter, December 2, 1915, Splidtdorf Electrical Co. to Williams..... | 98 |
| No. 61—Letter, August 10, 1915, addressed to "Dear Van" | 98 |
| No. 62—Voucher check for \$6,728.00, dated January 13, 1919, Webster Electric Co. to Split- tdorf Electrical Co..... | 101 |
| No. 64—Escrow agreement between John L. Milton and Webster Electric Co., dated April 10, 1912 | 103 |
| Acceptance of escrow, signed by Lynn A. Wil- liams | 105 |
| Agreement between John L. Milton and Webster Electric Co., dated April 10, 1912..... | 105 |
| Assignment from John L. Milton, dated April 10, 1912 | 111 |
| Notary's certificate..... | 112 |
| No. 65—Agreement between John L. Milton and Web- ster Electric Co., dated November 23, 1907..... | 113 |
| No. 66—Letter and envelope, dated May 5, 1916, Gerald D. Chiville to John L. Milton..... | 121 |
| No. 67—Letter, May 9, 1916, Milton to Chiville..... | 123 |

| | Page. |
|--|-------|
| Plaintiff's Exhibit No. 68—Letter, October 7, 1915, Milton to Williams.. | 124 |
| Letter, November 7, 1915, to Milton..... | 124 |
| Letter, November 19, 1915, to Milton..... | 125 |
| Letter, November 20, 1915, Milton to Williams | 125 |
| Letter, December 30, 1915, Williams to Mil- ton | 126 |
| Letter, January 3, 1916, Milton to Williams & Bradbury | 127 |
| Letter, January 4, 1916, Williams & Bradbury to Milton..... | 127 |
| Letter, January 6, 1916, Milton to Williams & Bradbury | 128 |
| Letter, January 11, 1916, Williams & Brad- bury to Milton..... | 128 |
| Letter, May 3, 1916, Williams, Bradbury & See to Milton..... | 129 |
| Letter, May 5, 1916, Milton to Williams, Brad- bury & See..... | 129 |
| Telegram, May 6, 1916, Williams, Bradbury & See to Milton..... | 130 |
| Letter, May 9, 1916, to Milton..... | 130 |
| Letter, September 11, 1916, to Milton..... | 131 |
| Letter, Milton to Williams, Bradbury & See. | 131 |
| Letter, October 27, 1916, to Milton..... | 132 |
| Letter, October 28, 1916, to Williams, Brad- bury & See..... | 132 |
| Telegram, October 28, 1916, Milton to Wil- liams, Bradbury & See..... | 133 |
| Letter, December 1, 1916, to Milton..... | 133 |
| Letter, December 5, 1916, Milton to Williams, Bradbury & See..... | 134 |
| Letter, December 18, 1916, to Milton..... | 134 |
| Letter, December 26, 1916, Milton to Wil- liams, Bradbury & See..... | 135 |
| Letter, December 27, 1916, to Milton..... | 136 |
| No. 68A—Letter, May 12, 1916, to Wm. Kroeplin..... | 136 |
| No. 68B—Letter, May 15, 1916, Kroeplin to Williams, Bradbury & See..... | 137 |
| No. 68C—Letter, May 18, 1916, to Kroeplin..... | 138 |
| No. 68D—Letter, May 20, 1916, Kroeplin to Williams, Bradbury & See..... | 139 |
| No. 74—Letter, September 9, 1908, Webster to Mil- ton | 139 |
| No. 75—Telegram, May 7, 1909, Webster to Webster Mfg. Co..... | 140 |
| No. 77—Oscillogram of defendant's device, type B.... | 141 |
| No. 78—Diagram defendant's device, type B, illus- trating angles of striking..... | 143 |
| No. 80—Trust agreement between John L. Milton and Webster Electric Co., dated December 11, 1915..... | 145 |

| | Page. |
|---|-------|
| Plaintiff's Exhibit No. 80—Acceptance of trust, signed by Lynn A. Williams | 148 |
| Escrow agreement between John L. Milton and Webster Electric Co., dated April 10, 1912 | 148 |
| Acceptance of escrow, signed by Lynn A. Williams | 150 |
| Assignment from John L. Milton to Lynn A. Williams, dated April 10, 1912..... | 151 |
| No. 81—Deposition of Frederick C. Manning—Witness in ex rel. Podlesak vs. Webster Electric Co. | 153 |
| Defendant's Exhibit 5—Assignment from trustees of Sumter Electrical Co. to Splittorf Electrical Co., dated September 26, 1916.... | 217 |
| No. 82—Deposition of Harry R. Vandever—Witness in ex rel. Podlesak vs. Webster Electric Co. | 275 |
| Letter, May 29, 1917, Van Deventer to Reynolds | 312 |
| Letter, November 3, 1913, Webster Electrical Co. to Van Deventer..... | 314 |
| No. 83—Notice to Lynn A. Williams..... | 327 |
| Abstract of minutes of a special meeting of the board of directors of the Splittorf Electrical Co., held December 9, 1916.... | 330 |
| Assignment from trustees of Sumter Electrical Co. to Splittorf Electrical Co., dated September 26, 1916..... | 330 |
| Defendant's Exhibit No. 1—Waterman letter of February 16, 1909.... | 333 |
| No. 2—Letter, April 6, 1909, Waterman to Kane.. | 335 |
| No. 4—Letter, April 16, 1909, Webster to Milton.. | 337 |
| No. 15—Letter, April 22, 1909, Webster to Milton.. | 337 |
| No. 5A—Letter, May 1, 1909, Webster to Milton.... | 338 |
| No. 16—Letter, May 1, 1909, Webster to Milton.... | 339 |
| No. 11—Letter, May 6, 1909, Webster to Milton.... | 339 |
| No. 12—Letter, May 8, 1909, Webster to Milton.... | 340 |
| No. 13—Letter, May 8, 1909, Webster to Milton.... | 341 |
| No. 14—Letter, May 10, 1909, Milton to Webster.... | 341 |
| No. 6—Letter, May 21, 1909, Milton to Webster.... | 342 |
| No. 8—Letter, May 21, 1909, Webster to Milton.... | 343 |
| No. 7—Letter, May 22, 1909, Webster to Milton.. | 343 |
| No. 9—Letter, May 21, 1909, Milton to Webster.... | 344 |
| No. 22—Letter, October 25, 1909, Webster to Milton | 345 |
| No. 22A—Letter, November 10, 1909, Milton to Couchman | 345 |
| No. 22B—Letter, November 10, 1909, to Webster.... | 346 |

INDEX.

ix

Page.

| | |
|---|-----|
| Defendant's Exhibit No. 30—Letter, September 10, 1910, Brown & Williams to Milton..... | 347 |
| Letter, September 29, 1910, Milton to Williams | 347 |
| No. 29—Letter, October 1, 1910, Williams to Milton | 347 |
| No. 39—Letter, October 10, 1910, Milton to Webster | 348 |
| No. 24—Letter, October 13, 1910, Williams to Milton | 348 |
| No. 25—Letter, October 13, 1910, Williams to Milton | 349 |
| No. 37—Letter, October 25, 1910, Williams to Milton | 350 |
| No. 34—Letter, December 3, 1910, Brown & Williams to Milton..... | 351 |
| No. 31—Letter, January 5, 1911, Brown & Williams to Milton..... | 351 |
| No. 32—Letter, February 7, 1911, Brown & Williams to Milton..... | 352 |
| No. 36—Letter, February 7, 1911, Williams to Milton | 352 |
| No. 38—Letter, February 8, 1911, to Webster..... | 353 |
| No. 35—Letter, February 9, 1911, Brown & Williams to Milton..... | 353 |
| No. 50—Letter, July 23, 1914, Loeb to Hood & Schley | 354 |
| No. 72—Letter, April 22, 1915, Williams to Podlesak | 354 |
| No. 41—Letter, November 19, 1915, Williams to Milton | 355 |
| No. 42—Letter, November 29, 1915, to Williams.... | 356 |
| No. 40—Letter, June 2, 1916, Brown to Milton.... | 357 |
| No. 43—Letter, June 7, 1916, Milton to Brown.... | 357 |
| No. 44—Letter, September 11, 1916, Williams to Milton | 358 |
| No. 44A—Blank form: concession of priority..... | 359 |
| No. 44B—Letter, September 13, 1916, Motor Ignition & Devices Co. to Williams, Bradbury & See..... | 359 |
| No. 49—Certified photographic copy of the file-wrapper and contents in the matter of interference No. 39,013, Milton vs. Kane, subject-matter: magneto generator..... | 360 |
| No. 54—Certified photographic copy of the file-wrapper and contents in the matter of the letters patent of Edmund Joseph Kane, assignor to Webster Electric Co., No. 1,204,573..... | 500 |

| | Page. |
|---|-------|
| Defendant's Exhibit No. 55—Certified photographic copy of the file-wraper and contents in the matter of the letters patent of Edmund Joseph Kane, assignor by mesne assignments to Webster Electric Co., No. 1,280,105..... | 622 |
| No. 57—Decision of the Court of Appeals of the District of Columbia in the interference with Kane vs. Podlesak..... | 700 |
| No. 65—Assignment of John L. Milton to Lynn A. Williams, trustee, dated April 10, 1912.. | 702 |
| No. 67—Assignment of Lynn A. Williams, trustee, to Webster Electric Co., dated June 28, 1918 | 704 |
| No. 68—Assignment of Webster Electric Co. of West Virginia to Webster Electric Co. of Wisconsin, dated March 12, 1918..... | 705 |
| No. 73—Transcript of record in the municipal court of Chicago, Cook County, State of Illinois, in case of Webster Electric Co. of West Virginia vs. Tesla Emil Podlesak | 710 |
| Placita | 710 |
| Præcipe for summons..... | 711 |
| Summons | 712 |
| Return to summons..... | 712 |
| Special appearance of Tesla Emil Podlesak.... | 713 |
| Order extending time for filing statement of claim | 714 |
| Notice of petition for removal..... | 714 |
| Petition for removal..... | 716 |
| Bond for removal..... | 718 |
| Order extending time for filing statement of claim | 719 |
| Order of removal..... | 719 |
| Certificate of clerk..... | 720 |
| No. 74—Statement of claim filed in municipal court of Chicago, Cook County, State of Illinois, in case of Webster Electric Co. of West Virginia vs. Tesla Emil Podlesak. | 721 |
| License agreement between Emil Podlesak and Henry Joseph Podlesak, parties of the first part, and Webster Electric Co. of West Virginia, dated February 5, 1914..... | 722 |
| License agreement (shop right) between Emil Podlesak and Henry Joseph Podlesak, parties of the first part, and Webster Electric Co. of West Virginia, dated February 5, 1914 | 726 |

| | |
|--|-----|
| Defendant's Exhibit No. 75—Stipulation, filed January 25, 1918, in U. S. district court, northern district of Illinois, eastern division, in case of Webster Electric Co. of West Virginia vs. Tesla Emil Podlesak | 739 |
| No. 76—Order of January 25, 1918, dismissing case of Webster Electric Co. vs. Tesla Emil Podlesak, No. 22,313..... | 740 |
| No. 16—Drawing | 741 |
| No. 20—Drawing | 742 |
| No. 51—Illustrations of magnetos..... | 745 |
| Specification No. 365,506, R. E. Olds, October 24, 1890..... | 748 |
| No. 773,062, R. & J. Cooper, October 25, 1904..... | 756 |
| No. 754,286, F. Dickinson, March 8, 1904..... | 764 |
| No. 820,535, G. J. Weber, May 15, 1906..... | 768 |
| No. 900,264, L. H. Wattles, January 12, 1909..... | 778 |
| No. 916,312, R. Henning, March 23, 1909..... | 788 |
| No. 947,647, H. J. Podlesak and T. E. Podlesak, January 25, 1910 | 802 |
| No. 948,483, H. J. Podlesak and T. E. Podlesak, February 8, 1910..... | 808 |
| No. 990,935, L. H. Wattles, May 2, 1911..... | 814 |
| No. 1,003,649, H. J. Podlesak and T. E. Podlesak, September 19, 1911..... | 824 |
| No. 1,022,642, H. J. Podlesak, April 9, 1912..... | 834 |
| No. 1,051,373, J. L. Milton, January 21, 1913..... | 840 |
| No. 1,053,107, J. L. Milton, February 11, 1913..... | 846 |
| No. 1,056,360, T. E. Podlesak and H. J. Podlesak, March 18, 1913..... | 854 |
| No. 1,066,048, J. L. Milton, May 12, 1914..... | 866 |
| No. 1,068,052, E. Podlesak, May 26, 1914..... | 874 |
| No. 1,068,754, E. Podlesak, June 2, 1914..... | 888 |
| No. 1,101,956, E. Podlesak, June 30, 1914..... | 898 |
| No. 13,878, E. Podlesak, reissued February 9, 1915..... | 904 |
| No. 1,204,573, E. J. Kane, November 14, 1916..... | 914 |
| No. 1,236,790, H. R. Van Deventer, August 14, 1917..... | 924 |
| No. 1,280,105, E. J. Kane, September 24, 1918..... | 932 |
| Clerk's certificate..... | 937 |
| Writ of certiorari and return..... | 937 |
| Defendant's Exhibit 56—Transcript of record in case of Edmund J. Kane vs. Emil Podlesak, No. 1147, in the Court of Appeals of the District of Columbia | 940 |
| Petition of appeal to Court of Appeals..... | 940 |
| Certificate of Commissioner to record..... | 944 |
| Papers selected In the matter of the reissue letters patent granted to Emil Podlesak, numbered 13,878, dated February 9, 1915, for current-generators and igniters for internal-combustion engines..... | 944 |

| | Page. |
|---|-------|
| Defendant's Exhibit 56— | |
| Petition of Emil Podlesak..... | 944 |
| Specification of Emil Podlesak..... | 945 |
| Oath of Emil Podlesak..... | 953 |
| Abstract | 956 |
| Interference letter, dated October 26, 1915 | 957 |
| Printed specification and drawings, pat- ent No. 13,878..... | 959 |
| Papers selected in the matter of the applica- tion of Edmund Joseph Kane, assignor to Webster Electric Company, filed January 14, 1915, for electric igniters, serial number 2097 | 960 |
| Petition of Edmund Joseph Kane..... | 960 |
| Specification of Edmund Joseph Kane.. | 960 |
| Oath of Edmund Joseph Kane..... | 964 |
| Letter of examiner, dated March 24, 1915 (rejection)..... | 965 |
| Amendment A, filed April 17, 1915.... | 965 |
| Letter to office and supplemental oath, filed May 10, 1915..... | 969 |
| Letter of examiner, dated August 6, 1915 (rejection) | 970 |
| Interference letter, dated August 24, 1915 | 971 |
| Amendment, filed August 26, 1915..... | 973 |
| Circulars (3)..... | 979 |
| Petition, filed September 3, 1915, and Commissioner's decision thereon, dated September 15, 1915..... | 979 |
| Affidavit of Edmund Joseph Kane, filed September 7, 1915..... | 982 |
| Examiner's statement, dated September 8, 1915..... | 983 |
| Amendment, not entered, filed Septem- ber 20, 1915..... | 983 |
| Petition, filed October 6, 1915, and Com- missioner's decision thereon, dated October 9, 1915..... | 986 |
| Examiner's statement, dated October 9, 1915 | 988 |
| Request for jurisdiction, dated October 18, 1915..... | 988 |
| Amendment B, filed October 18, 1915.. | 989 |
| Interference letter, dated October 26, 1915 | 991 |
| Drawing (1 sheet)..... | 993 |

INDEX.

Xiii

Page.

| | |
|--|------|
| Defendant's Exhibit 56—Papers selected in the matter of letters patent granted Emil Podlesak, numbered 1,055,076, dated March 4, 1913, for current generators and igniters for internal-combustion engines | 994 |
| Petition and specification of Emil Podlesak | 994 |
| Oath of Emil Podlesak..... | 1002 |
| Letter of examiner, dated July 5, 1912 (rejection) | 1003 |
| Amendment A, filed November 8, 1912.. | 1004 |
| Amendment B, dated February 18, 1913. | 1005 |
| Printed specification and drawings, patent No. 1,055,076..... | 1007 |
| In the matter of interference No. 39,181, Podlesak vs. Kane..... | 1014 |
| Copy of U. S. patent to G. J. Weber, No. 820,535 | 1014 |
| Copy of U. S. patent to L. H. Wattles, No. 990,935..... | 1022 |
| Copy of U. S. patent to J. L. Milton, No. 1,006,048 | 1029 |
| Copy of U. S. patent to E. Podlesak, No. 1,008,052 | 1035 |
| Copy of U. S. patent to E. J. Kane, No. 1,204,573 | 1044 |
| Declaration of interference, dated October 20, 1915..... | 1053 |
| Preliminary statement of Podlesak, filed November 27, 1915..... | 1056 |
| Order to show cause, dated December 17, 1915..... | 1057 |
| Motion to dissolve, filed February 1, 1916 | 1057 |
| Decision of the Commissioner on motion, dated February 3, 1916..... | 1061 |
| Brief for Podlesak on motion to dissolve, filed March 9, 1916..... | 1062 |
| Decision of the law examiner, on motion, dated March 22, 1916..... | 1068 |
| Decision of examiner of interferences, dated March 24, 1916..... | 1073 |
| Appeal to examiners-in-chief, filed April 5, 1916 | 1074 |
| Motion to advance date of hearing, filed April 25, 1916..... | 1075 |
| Decision of examiners-in-chief on motion, dated April 26, 1916..... | 1078 |
| Brief for Emil Podlesak, filed May 16, 1916.. | 1079 |
| Decision of examiners-in-chief, dated January 15, 1917..... | 1091 |

| | Page. |
|---|-------|
| Defendant's Exhibit | |
| Appeal to Commissioner, filed February 5, 1915 | 1092 |
| Brief for Emil Podlesak, filed March 10, 1917. | 1094 |
| Decision of the Commissioner, dated June 18, 1917 | 1105 |
| Notice of appeal to the Court of Appeals, filed August 6, 1917..... | 1107 |

BILL OF COMPLAINT

(Filed October 12, 1915)

IN THE DISTRICT COURT OF THE UNITED STATES

For the Northern District of Illinois.

Eastern Division.

Webster Electric Company,
Plaintiff

vs.

Henry Joseph Podlesak, Tesla Emil
Podlesak, Sumter Electrical Com-
pany and Splitdorf Electric Com-
pany,

Defendants.

In Equity No.
Letters Patent

No. 947,647

No. 948,483

No. 1,003,649

No. 1,002,642

No. 1,056,360

No. 1,101,956

No. 1,098,754

No. 1,098,052

Reissue No. 13,878

To the Honorable Judges of the District Court of the United States in and for the Northern District of Illinois, Eastern Division, in Chancery Sitting:

Webster Electric Company, a corporation organized, chartered and existing under and by virtue of the laws of the State of West Virginia, having its principal place of business at Racine, in the County of Racine and State of Wisconsin, brings this its bill of complaint against Henry Joseph Podlesak (hereinafter sometimes called Henry J. Podlesak), Tesla Emil Podlesak (hereinafter sometimes called Emil Podlesak or T. Emil Podlesak, or Tesla E. Podlesak), citizens of Illinois, and residents of this Division and District, Sumter Electrical Company, a corporation organized, chartered and existing under and by virtue of the laws of the State of South Carolina, and Splitdorf Electrica Com-
pany, a corporation organized, chartered and existing under and by virtue of the laws of the State of New Jersey, both of which said corporations have regularly established places for doing business and duly appointed authorized agents or officers located in the City of Chicago, State of Illinois, in this Division and District, and complains and shows:

1. That the said Henry J. Podlesak and the said Emil Podlesak, before September 25, 1901, were the first, joint and original inventors of improvements in Inductor Generators for Ignition Purposes, and on September 25, 1901, they applied to the Commissioner of Patents for United States Letters Patent thereon, whereupon division of said application being required by the Patent Office, three additional applications on the same subject matter were filed on January 28, 1908; whereupon such proceedings were had that the following patents were issued to said Henry J. Podlesak and said Emil Podlesak jointly, on the date set forth for each:

Inductor Generators for Ignition Purposes, No. 947,647, granted January 25, 1910 (application Serial No. 413,070 filed January 28, 1908, renewed February 10, 1909, Serial No. 477,251);

Inductor Generators for Ignition Purposes No. 948,483, granted February 8, 1910, (application for Serial No. 413,069, filed January 28, 1908);

Inductor Generators for Ignition Purposes, No. 1,003,649, granted September 19, 1911, (application Serial No. 413,068, filed January 28, 1908);

Inductor Generators for Ignition Purposes, No. 1,056,360, granted March 18, 1913 (application Serial No. 76,559, filed September 25, 1901);

4 That the Said Henry J. Podlesak, before February 17, 1909, was the first, sole and original inventor of improvements in Low Tension Sparking Mechanism for the Gas Engines, and on February 17, 1909, he applied to the Commissioner of Patents for United States Letters Patent thereon, whereupon such proceedings were had that the following Letters Patent were issued to said Henry J. Podlesak on the date set forth:

Low Tension Sparking Mechanism for the Gas Engines, No. 1,022,642, granted April 9, 1912) application Serial No. 478,355, filed February 17, 1909);

That the said Emil Podlesak, before November 12, 1912, was the first, sole and original inventor of improvements in Ignition Devices for Explosive Engines; that the said Emil Podlesak, before December 27, 1911, was the first, sole and original inventor of improvements in Inductor Alternators; that the said Emil Podlesak, before July 21, 1911, was the first, sole and original inventor of improvements in Magneto Machines; and upon the above dates, respectively, he applied

to the Commissioner of Patents for United States Letters patent thereon, whereupon such proceedings were had that the following patents were issued to said Emil Podlesak on the date set forth on each:

Ignition Devices for Explosive Engines, No. 1,101,956, granted June 30, 1914 (application Serial No. 734,143, filed November 29, 1912);

Indictor Alternators, No. 1,098,754, granted June 2, 1914, (application Serial No. 668,153, filed December 27, 1911);

Magneto Machines, No. 1,098,052, granted May 26, 1914 (application Serial No. 639,738, filed July 21, 1911);

5 That the said Emil Podlesak, before the 15th day of April, 1912, was the first, sole and original inventor of improvements in Current Generator and Igniter for Internal Combustion Engines; and on April 15, 1912, he applied to the Commissioner of Patents for United States Letters Patent thereon, whereupon such proceedings were had that the following Letters Patent were issued to said Emil Podlesak, on the date set forth;

Current Generator and Igniter for Internal Combustion Engines, No. 1,055,076, granted March 14, 1913 (application Serial No. 690,921, filed April 15, 1912).

Said Patents were issued in the name of the United States of America, signed by the Commissioner of Patents under the seal of the Patent Offices, and were recorded, with their specifications, in books kept for the purpose, whereby the said Henry J. Podlesak and the said Emil Podlesak, jointly, and the said Henry J. Podlesak and the said Emil Podlesak, respectively, their heirs and assigns, were granted, respectively, the exclusive right to make, use and vend said inventions for seventeen years from the respective dates of the said patents in the United States of America and the Territories thereof. The said inventions of the said Henry J. Podlesak and the said Emil Podlesak, jointly, and the said Henry J. Podlesak and the said Emil Podlesak, were respectively new, useful, not known or used by others in this country before their respective inventions thereof, not

6 patented or described in any printed publication anywhere before their respective inventions, or more than two years before their respective applications, and not in public use or on sale in this country for more than two years before their respective applications, not patented in any foreign country by them or either of them, or by their

or either of their legal representatives, on applications filed more than one year before their respective applications in this country, and not abandoned.

That the aforesaid Letters Patent No. 1,055,076 were inoperative by reason of a defective and insufficient specification to fully secure to said Emil Podlesak, his heirs and assigns, the aforesaid invention and improvement which was described in said Letters Patent and intended to be secured thereby, and that the error in said Letters Patent rendering the same inoperative, as aforesaid, arose by inadvertence, accident and mistake, and without any fraudulent or deceptive intention on the part of the said Emil Podlesak, and on account of the defects and insufficiencies of said Letters Patent, the said Emil Podlesak, on December 23, 1914, made application, to the Commissioner of Patents in accordance with the then existing Acts of Congress, for leave to surrender the said Letters Patent and for the grant to him of new Letters Patent for the same invention, in accordance with the amended specifications presented with said application, and for the unexpired part of the term of said original Letters Patent; and that thereupon, having fully complied with all the conditions and requirements of said Acts of Congress, and
7 having paid the fee required by law, leave to surrender said original letters Patent was duly granted by the Commissioner of Patents, whereupon such proceedings were had that the following Letters Patent were reissued to said Emil Podlesak, on the date hereinafter set forth:

Current Generator and Igniter for Internal Combustion Engines, Reissue No. 13,878, granted February 9, 1915 (Reissue application serial No. 878,726, filed December 23, 1914);

That said reissue patent was issued in the name of the United States of America, signed by the Commissioner of Patents under the seal of the Patent Office, and was recorded with its specification, in books kept for the purpose, whereby the said Emil Podlesak, his heirs and assigns, were granted the exclusive right to make, use and vend said invention for the unexpired term of said original Letters Patent No. 1,055,076, to wit, until the expiration of seventeen years from March 4, 1913.

Printed copies of all of said Letters Patent are hereunto annexed and made a part of this Bill of Complaint.

II. That on or about November 2nd, 1908, the said Henry J. Podlesak and the said Emil Podlesak, by an instrument

in writing, thereafter duly recorded, and for a valuable consideration, granted unto Webster Mfg. Co., a corporation organized, chartered, and existing under and by virtue of the laws of the State of Illinois, and having its principal place of business at Chicago, Illinois, the exclusive right and
8 license to manufacture, use and sell the inventions or improvements, and each and every of them described and claimed in the aforesaid applications for Letters Patent Serial Nos. 76,559, 413,068, 413,069, and 413,070, within and throughout the United States and the Territories and possessions thereof, for and during the term of any patent or patents which might be granted upon said applications, together with all privileges and rights of section as might accrue under the said patents, and in and by which said instrument in writing, the said Henry J. Podlesak and the said Emil Podlesak agreed with said Webster Mfg. Co., and their assigns that they would not, while the aforesaid exclusive license was in force, either make, use, or sell such inventions, or grant, permit or encourage others to do so. Profert is hereby made of said instrument granting the said exclusive license hereinabove referred to, or of duly certified copies thereof to be produced in Court when necessary, and a copy of said instrument granting said exclusive license is hereto attached and marked "Exhibit A" and made a part hereof.

That thereafter, on or about March 26, 1909, your orator by name of Hertz Electric Company was incorporated under and by virtue of the laws of the State of West Virginia, and that on or about March 26, 1909, the said Webster Mfg. Co. did immediately thereafter, by an instrument in writing thereafter duly recorded, and for a valuable consideration, sell, assign, and transfer to your orator under the name of

Hertz Electric Company, all of its right, title and interest
9 in and to the said applications for patents, Serial Nos. 76,559, 413,068, 413,069 and 413,070, and any and all patents which might be granted upon or as the result of said application, and its whole right, title and interest in and to the aforesaid license agreement (Exhibit A); and that on or about July 22nd, 1909, the corporate name of the said West Virginia corporation, Hertz Electric Company, was changed to Webster Electric Company.

III. That on or about August 17, 1912, the said Henry J. Podlesak and the said Emil Podlesak did, by an instrument in writing, and for the valuable considerations in hand paid,

respectively, sell, assign, and transfer to ~~one~~ another certain undivided parts of their interest in and to all of the aforesaid applications for Letters Patent, and patents issued or to be issued thereupon, whereby 49/100 of any interest which the said Henry J. Podlesak had in any and all of the aforesaid applications, and patents issued or to be issued thereupon, was sold, assigned and transferred to the said Emil Podlesak, and whereby 51/100 of any interest which the said Emil Podlesak had in any and all of the aforesaid applications, and patents issued or to be issued thereupon, was sold, assigned and transferred unto the said Henry J. Podlesak; and profert is hereby made of said instrument of said instrument of assignment hereinabove referred to, or a duly certified copy thereof in court to be produced when necessary, and a copy of said instrument of assignment is hereto attached and made a part hereof, and marked "Exhibit B."

IV. That on or about the 5th day of February, 1914, said Henry J. Podlesak and said Emil Podlesak, by an instrument in writing and for a valuable consideration, granted unto your orator, Webster Electric Company, a certain license to make, use and vend the inventions or improvements, and each and every one of the inventions or improvements, described, set forth and claimed in the aforesaid patents Nos. 947,647, 948,483 and 1,003,649, for the full remaining terms of the said patents, or any of them, within and throughout the United States of America and Territories and possessions thereof, together with all privileges and rights of action as might accrue thereunder, and profert is hereby made of said instrument of license, or of a duly certified copy thereof to be produced in court when necessary, and a copy of said instrument of license is hereto attached and made a part hereof, and marked "Exhibit C."

V. That on or about the 5th day of February, 1914, said Henry J. Podlesak and said Emil Podlesak, by an instrument in writing, and for a valuable consideration, granted
11 unto your orator, Webster Electric Company, a certain license to make, use and vend the inventions or improvements, and each and every one of the inventions or improvements, described, set forth and claimed in the aforesaid patents No. 1,022,642, Reissue No. 13,878, No. 1,056,360, No. 1,101,956, No. 1,098,754 and No. 1,098,052, for the full remaining terms of the said patents, or any of them, within and

throughout the United States of America and Territories and possessions thereof, together with the right of action against infringers accruing under the said patents, or any of them, and profert is hereby made of said instrument of license, or of a duly certified copy thereof to be produced in court when necessary, and a copy of said instrument of license is hereto attached and made a part hereof, and marked "Exhibit D."

VI. That on or about January 20, 1915, a certain "Supplemental Agreement" in writing, relative to the aforesaid Letters Patent, was entered into by and between the said Henry J. Podlesak and the said Emil Podlesak and your orator, the Webster Electric Company, under and by virtue of which said Supplemental Agreement the rate of royalty or license fee to be paid by your orator to the said Henry J. Podlesak and the said Emil Podlesak, and the minimum annual amount of royalties or license fees, as provided for in the aforesaid license agreements of February 5, 1914, was altered, but under which said supplemental agreement the other terms and conditions of the aforesaid license agreement of February 5, 1914, were not modified, and profert is hereby made of said supplemental agreement, or of a duly certified copy thereof to be produced in court when necessary, and copy of said supplemental agreement is hereto attached and made a part hereof, and marked "Exhibit E."

13 VII. That your orator, Webster Electric Company, among its other corporate powers, is authorized to engage in the business of manufacturing, selling and dealing in electric generators and ignition devices for internal combustion engines, and that ever since its organization and incorporation the said Webster Electric Company has been engaged in manufacturing, selling and dealing in electric generators and ignition devices for internal combustion engines of the class set forth, described and claimed in the aforesaid Letters Patent.

That its predecessor, the Webster Manufacturing Company (see Exhibit A) was similarly engaged in manufacturing, selling and dealing in such electric generators and ignition devices embodying the inventions of one John L. Milton, of Louisville, Kentucky, and under certain applications for United States Letters Patent applied for by the said John L. Milton and upon which said applications Letters Patent of

the United States have been duly granted as follows: Nos. 959,954, 1,051,376, 1,053,107, 1,069,048 and 1,096,853; and under Letters Patent of the United States Nos. 608,895, 608,896, and 638,933, to Benjamin McInnerney.

That your orator the Webster Electric Company, originally called Hertz Electric Company, as hereinbefore set forth, has, at the expense of many years of effort and of many thousands of dollars, to-wit, not less than Two Hundred Thousands of Dollars (\$200,000.00), built up and developed its business in reliance upon its rights under said patents, and that it
14 is essential to your orator's business, and the success thereof that its rights under and by virtue of the said patents should be fully protected. And that your orator has invested large sums of money in the equipment of a plant for such manufacture and in advertising and otherwise bringing its products to the favorable attention of prospective buyers and users, and has built up a large and expanding and now lucrative business based wholly and entirely upon electric generators and ignition devices embodying the inventions of the said Podlesaks, described, claimed and set forth in the aforesaid Podlesak patents.

VIII. That on or about the tenth day of August 1909, the said Emil Podlesak was employed by your orator at a salary of One Hundred Twenty-five Dollars (\$125.00) per month to undertake certain experimental and development work relating to the aforesaid generators and ignition devices embodying the inventions of said Milton and said McInnerney for the benefit of your orator; that he represented himself to be efficient in the manner of perfecting inventions and improvements to be used in connection with the generators and ignition devices manufactured, sold and dealt in, by your orator.

That as a result of such employment the said Emil Podlesak was by your orator put in full possession of all of the facts relating to its business and to the generators and ignition devices manufactured, sold, and dealt in by your orator and was provided by your orator with materials, tools,
15 machinery laboratory and testing apparatus and devices, and with the assistance of mechanics, artisans, draftsmen, and other skilled workmen, hired by your orator to carry out the orders and instructions of the said Emil Podlesak in developing, improving, and perfecting the generators and ignition devices manufactured, sold, and dealt in, and to

be manufactured, sold and dealt in by your orator; that your orator from time to time adoped and incorporated into its commercial product the designs, improvements, and inventions developed and submitted by the said Emil Podlesak, all with the full knowledge and approval of the said Emil Podlesak and as a result of the terms and conditions of the employment of said Emil Podlesak by your orator.

That the salary of the said Emil Podlesak was increased by your orator from time to time, and that finally on or about the 18th day of May, 1910, the said Emil Podlesak was by your orator made and appointed, at an initial salary of One Hundred and Fifty Dollars (\$150.00) per month, its factory Superintendent and in this capacity as head of its Experimental Department and within a year thereafter as its Factory Superintendent, was given entire control and direction of the manufacturing operations of your orator, including full charge and directions of this so-called experimental department in which the work of further modifying developing, improving, and perfecting the generators and ignition devices manufactured, sold, and dealt in by your orator was

16 That following the appointment of the said Emil Podlesak as such Factory Superintendent and Head of the Experimental Department his salary was from time to time increased by your orator until on or about the third day of March, 1913, the said Emil Podlesak was by your orator made and appointed and employed by your orator as Superintendent of its factory with the title of Works Manager for a period of three (3) consecutive years from the first day of January, 1913, at a salary of Two Hundred Ninety-one Dollars (\$291.00) per month for the first eleven (11) months of said term, at a salary of Two Hundred Ninety-nine Dollars (\$299.00) for the twelfth month of said term, at a salary of Three Hundred Thirty-three Dollars (\$333.00) per month for the following eleven (11) months of said term, and at a salary of Three Hundred Thirty-seven Dollars (\$337.00) per month for the twenty-fifth month of said term and up to and including the last month of said term of three years, the following said third day of March, 1913, the said Emil Podlesak was by virtue of his employment by your orator, given by your orator entire and complete charge of the manufacturing, experimental, and production departments of the business of your orator, and the said Emil Podlesak was made responsible directly to the Board of Directors of your orator

Bill of Complaint.

and to no one else; that on the 4th day of March 1912, the said Emil Podlesak was by your orator's Board of Directors
17 elected Secretary of the said Webster Electric Company.

That in his capacity as an officer and employee of your orator the said Emil Podlesak was given and availed himself of the fullest opportunity to familiarize himself with every detail of your orator's business, including its methods and secrets, its costs of production, its selling prices, its customers and their dealings with your orator, its completion, its finances, its developmental and experimental work, and its plans for the future business and for future development and improvement of the generators and ignition devices manufactured, sold and dealt in, or to be manufactured, sold and dealt in by your orator.

That the said Emil Podlesak represented to your orator that in his successive capacities as Experimenter, Inventor, Superintendent, Works Manager, and Secretary, he would be efficient, honest, and honorable, and that he would not abuse the confidences reposed in him, or the confidential knowledge and information imported to him or acquired by him.

IX. That pursuant to the terms and conditions of his employment by your orator, and pursuant to the understand and agreement relating to such employment by your orator, the said Emil Podlesak, prior to the twenty-first day of July, 1911, invented certain improvements in magneto machines which was a form of generator and ignition device manufactured, sold and dealt in by your orator; that through attorneys designated by your orator the said Emil

Podlesak made application for the United States Letters Patent covering such improvements; that said application was filed in the United States Patent Office on July 21, 1911, and given Serial No. 639,738, and was prosecuted by the said attorneys designated by your orator with the result that United States Letters Patent No. 1,098,052 were, on May 26, 1914, granted covering the said invention of the said Emil Podlesak; that the expenses of preparing and prosecuting the said application were borne by your orator upon the understanding and agreement with the said Emil Podlesak that your orator should and should have the exclusive right and license to make, use, and sell the invention described and claimed in the said application and Letters Patent under terms and conditions identical with those set forth in the aforesaid license agreement dated November 2, 1908 (Exhibit A).

X. That the said Henry Joseph Podlesak is a brother of the said Emil Podlesak and is a registered Patent Attorney and has at all times been familiar with all of the transactions and doings of said Emil Podlesak herein set forth, and has aided, assisted, and co-operated with the said Emil Podlesak in all of his transactions and doings, as herein set forth.

XI. That prior to the twenty-seventh day of December, 1911, the said Emil Podlesak in the courses of his employment by your orator and as a part of his duties in such employment invented certain improvements in inductor alternators; that prior to April 15, 1912, the said Emil Podlesak 19 invented certain improvements in current generators and ignitors for internal combustion engines; that prior to November 29, 1912, the said Emil Podlesak invented certain improvements in ignition devices for explosive engines; that all said improvements were, under the terms and conditions of his employment by your orator, invented by the said Emil Podlesak as your orator's Experimenter, Inventor and Superintendent, and were immediately incorporated by your orator, under the direction and supervision of said Emil Podlesak, into the generators and ignition devices manufactured, sold and dealt in by your orator.

But the said Emil Podlesak delayed and postponed making and failed to make application for the United States Letters Patent upon the said inventions through the attorneys of your orator and at the expenses of and for the benefit of your orator as had been the understanding and agreement between your orator and the said Emil Podlesak, but on the contrary, as your orator did not until long afterwards learn or discover, the said Emil Podlesak did, in co-operation and connivance with the said Henry Joseph Podlesak, deceitfully, wrongfully, and fraudulently make applications for the United States Letters Patent covering the said inventions, the said applications having been filed respectively upon the following dates; to wit:

Inductor Alternator—Application filed December 27, 1911,—Serial No. 668,153.

Current Generator and Igniter for Internal Combustion Engines—Application filed April 15, 1912, Serial No. 699,021.

20 Ignition Devices for Explosive Engines—Application filed November 29, 1912—Serial No. 734,143.

on which said applications United States Letters Patent have issued respectively under the following numbers, to wit:

Bill of Complaint.

1,098,754, patented June 2, 1914.

1,055,076, patented March 4, 1913.

1,101,956, patented June 30, 1914.

that the said applications for United States Letters Patent were filed by the said Emil Podlesak through attorneys of his own selection and the selection of his brother Henry Joseph Podlesak; that the said applications were filed and prosecuted under the direction of the said Henry Joseph Podlesak and the said Emil Podlesak without the knowledge or consent of your orator; and the same were filed and prosecuted surreptitiously and secretly and contrary to the letter and spirit of the then existing terms and conditions of the contract of employment between your orator and the said Emil Podlesak.

XII. That each and all of the inventions described and claimed in said Letters Patent No. 1,055,075 (Re-issue patent No. 13,878), No. 1,101,956, No. 1,098,754 and 1,098,052 were made, conceived of, developed and reduced to practice by the said Emil Podlesak while in your orator's employment and as a part of the duty of the said Emil Podlesak as your orator's employee and during your orator's time and at your orator's expense, and for the benefit of your orator as herein elsewhere set forth.

21 XIII. That the invention described and claimed in said Letters Patent No. 1,022,642 is not in and of itself an electric generator but is and was an ignition device capable of use in connection with and as a part of electric generators and ignition devices such as were manufactured, sold and dealt in by your orator; that said invention described and claimed in said Letters Patent No. 1,022,642 was of no utility whatever in and of itself and that it was useful only when incorporated into or when used in connection with or as a part of some style of electric generator or some other ignition device; that said Henry Joseph Podlesak prior to the issue of said Letters Patent, as your orator is informed and believes, imparted to said Emil Podlesak arranged and agreed with the said Henry Joseph Podlesak to incorporate the said invention into the electric generators and ignition devices manufactured, sold and dealt in by your orator; and that the said invention was thereupon incorporated into your orator's electric generators and ignition devices and became an important part thereof without knowledge by your orator until shortly before February 5, 1914, as hereinafter stated, of any claimed or asserted patent rights with respect thereto in said Henry Joseph Podlesak or any one else.

That after the 9th day of April, 1912, upon which date the aforesaid Letters Patent No. 1,022,642 were issued to the said

22 Henry Joseph Podlesak, and prior to the 5th day of February, 1914, the said Henry Joseph Podlesak representing himself and the said Emil Podlesak, brought to the attention of your orator the fact that the said Letters Patent No. 1,022,642 had been issued, and claimed and represented to your orator, in his own behalf and in behalf of his brother, the said Emil Podlesak, that your orator was and had been infringing upon the said Letters Patent No. 1,022,642, in manufacturing, using, selling and dealing in the Electric Generators and Ignition devices manufactured and sold by your orator under the direction and supervision of the said Emil Podlesak as hereinabove set forth; and that the said Henry Joseph Podlesak, acting in his own behalf, and in behalf of the said Emil Podlesak, at or about the time notified your orator that certain applications for United States Letters Patent, covering inventions theretofore incorporated by your orator, under the direction and supervision of the said Emil Podlesak, in the Electric Generators and Ignition Devices manufactured, used, sold and dealt in by your orator, had been filed by the said Emil Podlesak; and that the said Henry Joseph Podlesak claimed and represented to your orator that your orator did then or upon the issue of United States Letters Patent resulting from the said applications would infringe some or all of the claims thereof, the applications thru referred to by the said Henry Joseph Podlesak being included in the list of said patents and hereinabove set forth, and having serial Nos. 690,921 (Patent No. 1,055,076, Reissue No. 13,878), 734, 143, 668,153, and 639,738.

23 XIV. That by virtue of the relations existing between your orator and said Emil Podlesak as hereinbefore stated inventions made by him while employed by your orator as aforesaid relating to the Electric Generators and Ignition Devices manufactured by your orator in equity and good conscience belonged to your orator, together with the whole right, title and interest in and to any and all United States Letters Patent that might be secured thereupon, or in the alternative, that your orator was entitled at least to the exclusive right and license to make, use and sell such inventions; that as said Podlesaks well knew, the invention covered by said Letters Patent No. 1,022,642 was so combined and used in connection with the inventions of said Emil Podlesak, while employed by your orator, in the Electric Generators and Ignition De-

24 vices manufactured and sold by your orator, that the same could not be segregated without very great injury to your orator's business; that said Henry Joseph Podlesak, acting on behalf of himself and said Emil Podlesak, took advantage of this situation and of the knowledge of himself and said Emil Podlesak in relation to your orator's business, and insisted that your orator was infringing upon their supposed rights under said inventions and the patents and applica-
24 tions for patents in relation thereto and insisted that your orator make with them some arrangement for paying them royalties or license fees; that thereupon, on or about the 5th day of February, 1914, and as a result of the demands and threats of the Podlesaks, as hereinabove set forth, your orator made and entered into the two written contracts or agreements with said Podlesaks hereinabove referred to, and copies of which said contracts are hereto attached and made a part hereof, as Exhibits C and D, respectively, and both of said contracts were made and entered into at the same time and as a part of the same transaction.

XV. That your orator and said Podlesaks proceeded to act under and in accordance with said contracts of February 5, 1914, (Exhibits C and D), (with the exception that under a verbal understanding and agreement between your orator and the said Podlesaks, a certain arbitrary royalty was agreed upon to be submitted in lieu of royalties at the rate of 5% upon a certain type or types of Electric Generator and Ignition Device first manufactured and sold by your orator about
25 six months prior to January 20, 1915), until on or about the 20th day of January, 1915, at or about which time they found and agreed that the method described in said license contracts of February 5, 1914 (Exhibit C and Exhibit D) for determining the amount of license fees or royalties to be paid thereunder by your orator was not satisfactory; and thereupon your orator and said Podlesaks, on or about the 20th day of January, 1915, made and entered into the aforesaid "Supplemental Agreement", a copy whereof is hereto attached and made a part hereof and marked "Exhibit E".

XVI. That the fees, costs and expenses of preparing the aforesaid application for the reissue of said original Letters Patent No. 1,055,076, and of prosecuting the said reissue application were borne by your orator; that the said application for reissue was prepared and prosecuted by the attorneys for your orator; that the said application for reissue having been prepared by your orator's attorneys, was duly submit-

ted to the said Emil Podlesak for the execution by him; that the said Emil Podlesak duly executed the said application before it was filed with the commissioner of Patents; that the said application for reissue was thus prepared and prosecuted by the attorneys for your orator with the full consent and approval of the said Emil Podlesak; that the said application for reissue was thus duly prepared and prosecuted under and by virtue of an agreement between your orator and the said Podlesaks; that your orator should and did have the same right, title and interest in and to the reissued Letters Patent to be granted thereupon as had prior thereto, as hereinabove set forth, been secured to your orator under the said original Letters Patent No. 1,055,076.

XVII. That your orator has fully and faithfully kept and performed each and all of the terms and agreements on its part to be kept and performed, which are contained in said license contracts (Exhibit C and Exhibit D) and said Supplemental Contract (Exhibit E), but as will hereinafter more fully appear, the said Podlesaks have not, nor have either of them, faithfully kept and performed the terms and conditions of said contracts on their part to be kept and performed, but on the contrary they have fraudulently and corruptly, and in consideration of sundry sums of money paid to them and promised to be paid to them by the Sumter Electrical Company and the said Splitdorf Electric Company, conspired and confederated with said companies to cheat and defraud your orator out of its substantial rights under said contracts and each of them, and to injure and if possible ruin the business of your orator.

27 XVIII. That said Splitdorf Electric Company and said Sumter Electrical Company during all the time when they were doing the things which herein they are alleged to have done, have been and they are now dominated and controlled by the same individuals; that said companies during all such times have been and are co-operating together; that during all said times said companies have kept and maintained, and they now keep and maintain, in the City of Chicago, County of Cook and State of Illinois, a common office where a large proportion of their actual business has been and is transacted; that the business of said companies has in fact been and now is attended to and taken care of by the same individuals; and that, as your orator is informed and believes, and so states the fact to be, said Splitdorf Electric Company has acquired and now has full dominion and control over said Sumter Electrical Company, but in exactly what

way your orator does not know and is unable to state, but seeks to have ascertained herein. And your orator charges that said companies in their dealings with said Podlesaks and in relation to the rights of your orator, have in truth and fact acted and do now act together and in confederation and conspiracy, and will, or threaten to, continue with one another to do so.

28 XIX. Said Splitdorf Electric Company and said Sumter Electrical Company have for many years been engaged, and are now engaged, in business similar to that of your orator, namely the manufacturing, selling and dealing in electric Generators and Ignition Devices; that said companies have been and now are active competitors of your orator.

That said Splitdorf Electric Company and said Sumter Electrical Company, well knowing the premises and rights of your orator, Webster Electric Company, therein and thereto, with the intent of injuring your orator and of depriving your orator of the benefits and advantages which might and otherwise would accrue unto your orator from its rights in and to said Letters Patent No. 1,101,956 and reissue No. 13,878, as aforesaid, have, since the dates upon which the said patents were granted respectively, as aforesaid, and before September 4, 1915, unlawfully and without license or allowance by and against the will of your orator and of said Podlesaks, and in infringement of their rights as set forth in and by said Letters Patent No. 1,101,956 and Reissue No. 13,878, committed acts of infringement, to wit, making, using and selling, and offering for sale, and importing into the said North-

29 ern District of Illinois, Eastern Division, for use and sale, and preparing, aiding and encouraging others so to do within the said District and Division, and elsewhere in the United States, Ignition Devices for Explosive Engines constructed in accordance with the disclosures of said Letters Patent No. 1,101,956 and Reissue No. 13,878, and embodying the inventions and improvements set forth, described and claimed therein; and that said Splitdorf Electric Company and Sumter Electrical Company are now continuing so to do, and are preparing and threatening so to do in the future; and that said Splitdorf Electric Company and Sumter Electrical Company, though fully advised and warned of your Orator's rights in the premises, and requested to abstain from and cease their infringing acts and operations, have disregarded such notices and warnings, and have refused to cease their infringing and unauthorized acts, all of which is

contrary to equity and good conscience and in violation of your orator's rights, as stated; ad further that, but for said unlawful and unauthorized acts, your orator would still be in receipt of all of the profits accruing from said Letters Patent, all of which works great and irreparable injury to your orator and to its rights in the premises.

30 XX. That the violation of your orator's rights under said license contracts (Exhibit C, Exhibit D and Exhibit E) and under said patents and the infringement thereof by the said Splitdorf Electric Company and the said Sumter Electrical Company was first brought to your orator's attention by the said Emil Podlesak and the said Henry Joseph Podlesak; that in or about the month of June, 1915, the said Henry Joseph Podlesak and the said Emil Podlesak urged and insisted that your orator bring suit against the said Sumter Electrical Company, or their customers, alleging the infringement of the aforesaid Reissue Letters Patent No. 13,878 and praying for an injunction restraining such infringement and for an accounting for damages and profits due your orator as a result thereof; ad that in compliance with such urgent and insistent suggestions, requests and demands of the said Emil Podlesak and the said Henry Joseph Podlesak, and in order to protect its own interests and business, your orator did, during the month of July, 1915, direct its attorneys and counsel to commence such suit or suits alleging such infringement and praying such relief against the said Sumter Electrical Company, whereupon the attorneys ad counsel for your orator did prepare such a bill of complaint, in which the said Emil Podlesak and the said Henry Joseph
31 Podlesak were joined, with their knowledge, consent and approval, and in accordance with the terms of the License Contracts (Exhibit C and Exhibit D) hereinbefore referred to, with your orator, as parties complainant; that the said bill of complaint was duly verified on or about the 31st day of July, 1915, and on or about the 3rd day of August, 1915, was forwarded by the attorneys and solicitors for your orator and for the said Emil Podlesak and the said Henry Joseph Podlesak to the United States District Court for the Eastern District of South Carolina, at Charleston, South Carolina, with directions that process be served promptly upon the said Sumter Electrical Company; that such process was duly served by the United States Marshal, return of such service having been made on or about the 25th day of August, 1915; that in and about the investigation of the law and the facts pertinent thereto, the preparation of the said bill of complaint,

Bill of Complaint.

the filing thereof and the procurement of service upon the said Sumter Electric Company, your orator went to great expense in time, labor and money.

XXI. That, having induced your orator to go to such great expense and to have prepared and delivered to the clerk of the said Court for filing the said bill of complaint against the said Sumter Electrical Company, the said 32 Emil Podlesak and the said Henry Joseph Podlesak, or one or both of them, did, as your orator is informed and believes, in some manner, the details of which are unknown to your orator, approach the said Splitdorf Electric Company and Sumter Electrical Company, and did then and there, and on or before the 20th day of August, 1915, advise and acquaint the said Splitdorf Electric Company and Sumter Electrical Company of the fact that the said bill of complaint was in course of preparation or had been prepared and forwarded to the Clerk of the said Court to be filed, and did unfairly, fraudulently and wrongfully connive and conspire with the said Splitdorf Electric Company and the said Sumter Electrical Company, unfairly and wrongfully, to violate the rights of your orator under the said License Contracts and "Supplemental Agreement" (Exhibit C, Exhibit D and Exhibit E) and all of the aforesaid Podlesak Patents; and that thereupon the said Splitdorf Electric Company and Sumter Electrical Company, in order if possible to harrass and embarrass your orator in the enforcement of its said rights, and to defeat if possible your orators said rights and the enforcement thereof against the said Splitdorf Electric Company and Sumter Electrical Company, and with a view to procuring a pre- 33 tended right to continue and to engage in the manufacture, use and sale of Electric Generators and Ignition Devices embodying the inventions and improvements described and claimed in the aforesaid Podlesak patents, made and entered into a fraudulent and corrupt arrangement and conspiracy with said Podlesaks, by which said Podlesaks, in consideration of large sums of money paid and to be paid to them, pretended to assign to said companies all of their right, title and interest in and to all of the said Podlesak patents and all of their rights under the said license Contracts and said Supplemental Agreement (Exhibits C, D and E) with your orator, and also pretended to give and grant to said companies the right to use said inventions and improvements in making, using and selling the Electric Generators and Ignition Devices produced and marketed by said companies, and also pretended to give to said companies the

right to control the said suit theretofore instituted by the said Emil Podlesak and the said Henry Joseph Podlesak and your orator against said Sumter Electrical Company, and any other or like litigation which might be instituted to protect the rights of your orator under the said contracts and under the said patents.

34 XXII. That pursuant to said fraudulent arrangement and conspiracy between them, and as part and parcel thereof, said Podlesaks and said Splitdorf Electric Company and Sumter Electrical Company, on or about the 4th day of September, 1914, made and entered into a contract in writing, in and by which they recited that said Podlesaks were the joint owners of certain inventions and Letters Patent, being the same inventions and Letters Patent embodied in said License Contracts (Exhibits C and D) and Supplemental Contract with your orator, and also the Letters Patent granted upon the applications embodied in said contracts with your orator; and also recited that the Podlesaks had granted licenses under said patents to your orator as evidenced by said License Contracts (Exhibits C and D) and Supplemental Contract; and also recited that said Splitdorf Electric Company and Sumter Electrical Company had been nominated by one F. C. Manning, the secretary of said Sumter Electrical Company, under an option dated August 20th, 1915, and that they were desirous of acquiring the entire interest in said inventions, Letters Patent and applications, together with all rights to manufacture, use and sell said inventions, subject only to the said licenses theretofore granted to your orator, and also the entire interest of the Podlesaks in said agreements with your orator, and in the business of manufacturing and selling magneto ignition apparatus

35 for internal combustion engines, i. e., Electric Generators and Ignition Devices, together with the good will appertaining to said business of the Podlesaks, in part represented by the association of their names, or either of them, with the business or apparatus manufactured or to be manufactured or sold under the aforesaid Letters Patent and applications on said agreements; also all re-issue granted or to be granted of said Letters Patent and patents granted on said applications, as well as any improvements on said inventions, the applications and patents therefor; and in and by said contract the Podlesaks, in consideration of the sum of Twenty-five Thousand Dollars to them in hand paid, purported to sell, assign, transfer, set over and convey to the

Splitdorf Electric Company, and the Sumter Electrical Company jointly, the entire right, title and interest in and to and under each of said inventions and improvements, Letters Patent and applications for Letters Patent, with all divisions, re-issues and extensions thereof, including the right to sue and recover to their own use for infringement of the same, whether committed before or after the date of said agreement, such purported assignment being subject only to the licenses theretofore granted to your orator; and said Podlesaks also by said contract, purported to assign to said Splitdorf Electric Company and Sumter Electric Company, 36 jointly their entire right, title and interest in, to and under, or arising out of said contracts with your orator, and the royalties and other profits flowing therefrom after the date of said contracts, as well as the entire interest and good will of the Podlesaks, in the business of manufacturing and selling magneto apparatus for internal combustion engines, (Electric Generators and Ignition Devices), and any other apparatus described or claimed in said Letters Patent and applications, and included in said contracts with your orator; the same to be held and enjoyed by said Splitdorf Electric Company and Sumter Electrical Company or the survivor of them, their successors and assigns, as fully, freely and entirely as they might have been held and enjoyed by the Podlesaks, had not said contract of September 4, 1915, been made; and in and by said contract it was further agreed that the preparation and prosecution of all applications for patents or inventions thereby conveyed, or agreed to be conveyed, including both pending and new applications,—original, divisional, reissue and extension, shall be by the attorney or attorneys for said Splitdorf Electric Company and Sumter Electrical Company on their designation, and the Podlesaks appointed said attorneys as their attorneys for that purpose, and agreed that they would at all times 37 keep the Splitdorf Electric Company and the Sumter Electrical Company, or their attorneys, fully informed as to inventions they might make which might fall within the terms of said agreement, and said Podlesaks further agreed that they would at all times aid and assist in the preparation and prosecution of said applications, and in any proceeding ancillary thereto; all, however, without expense to themselves for costs or attorney fees, said expenses to be borne entirely by the Splitdorf Electric Company and the

Sumter Electrical Company; and the Podlesaks further agreed that upon demand of the Splitdorf Electric Company and the Sumter Electrical Company, or their designated attorneys, they would execute assignments satisfactory to said attorneys, of all said inventions and improvements not specifically designated, but included within the scope of said contract of September 4, 1915, and in and by said contract of September 4, 1915, the Splitdorf Electric Company and the Sumter Electrical Company further agreed to pay the Podlesaks an additional sum of Forty Thousand Dollars in four equal installments of ten thousand dollars (\$10,000.) each on the first day of October of the years 1916, 1917, 1918, and 1919; and in and by said contract the Podlesaks further agreed that neither of them would engage in the manufacture

or sale of magneto ignition apparatus for internal combustion engines for the period of five (5) years, throughout the territory covered and included within the monopoly granted by said Letters Patent, it being the intention of the parties to said contract of September 4, 1915, that the field of business of the Splitdorf Electric Company and the Sumter Electrical Company included the whole of, and was co-extensive with said territory; and in and by said contract it was further understood and agreed that nothing in said covenant not to engage in business should operate to prevent the Podlesaks from engaging in business involving either the use of a magneto generator for other purposes than internal combustion engine ignition, or involving the accomplishing of internal combustion engine ignition by other means than magneto generator or dynamo, provided said business does not involve any infringement upon any claims or patents by said agreement purported to be assigned or agreed to be assigned to the Splitdorf Electric Company and the Sumter Electrical Company, the validity of which was expressly admitted and warranted by the Podlesaks; and in and by said contract of September 4, 1915, it was further understood and agreed that in the event of any breach of the covenant not to compete, the Podlesaks should become jointly and severally liable to the Splitdorf Electric Company and the Sumter

Electrical Company in the sum of Five Thousand Dollars (\$5,000.) as liquidated damages, and in addition thereto, for all actual damages in excess thereof, sustained by the Splitdorf Electric Company and the Sumter Electrical Company by reason of said breach, such damage to

Bill of Complaint.

be assessed and determined by a court of proper jurisdiction, and that pending such determination, all sums remaining in the hands of the Splitdorf Electric Company and the Sumter Electrical Company, and which would otherwise be due and payable under said contract to the Podlesaks, would be retained by the Splitdorf Electric Company and the Sumter Electrical Company as security for the payment of the aforesaid damages; and in and by said contract of September 4, 1915, the Podlesaks warranted that they had the right to manufacture, use and sell the inventions described in said patents, and applications for patents; that they were the owners of said letters patent and also of all of the other letters patent and inventions mentioned in said contracts with your orator; that they had the right to make said purported assignments by said contract of September 4, 1915; that they had not previously made any assignment or granted any license, shop right or other rights of any kind or character under said patents, except the rights granted under said
40 contracts with your orator; and that when they made and entered into said contracts with your orator, it was understood and agreed on the part of your orator, that said Podlesaks reserved and retained unto themselves, all the rights, title and interest in and by said contract of September 4, 1915, warranted, and that same were assignable by the Podlesaks at their own will and pleasure.

Said contract of September 4, 1915, will hereinafter for convenience only, be sometimes designated as the "Splitdorf" contract, and a copy thereof is hereto attached, marked Exhibit "F" and made a part hereof.

41 XXIII. That at the time said Splitdorf Contract was made and entered into, said Podlesaks were not, nor was either of them, nor were they or either of them at any other time, nor are they now engaged in the business of manufacturing or selling or dealing in magneto ignition apparatus for internal combustion engines (Electric Generators and Ignition Devices), and that they did not, nor did either of them, then, or at any time, or now, have any good will, attached to or connected with any such business. On the contrary, as hereinbefore shown, said Emil Podlesak had been for a long time in the employment of your orator, and while he was so employed, your orator built up a large and extensive business in manufacturing, selling and dealing in such magneto ignition apparatus, and at the time when the said Splitdorf Contract

was made and entered into your orator had, and now has, a very valuable good will connected with such business.

And your orator shows that by said License Contract (Exhibit D) between it and said Podlesaks, your orator agreed, except under certain additional obligations, to sell the apparatus manufactured by it thereunder only in connection with the apparatus manufactured and sold by your orator under said License Contract (Exhibit C), and that in and by

42 said License Contract (Exhibit C) your orator agreed to mark each of the devices manufactured thereunder with the words "Patented" and the surname of said Podlesaks, that your orator has so marked the devices manufactured and sold by it, and the same have become known on the market by that name; that the only good will which the Podlesaks at any time had in connection with the manufacture or sale of any such apparatus, was the good will arising from such use of their name by your orator under its said contracts with them.

And your orator charges that the attempt of said Podlesaks to grant, and of said Splitdorf Electric Company and said Sumter Electrical Company to acquire by said Splitdorf Contract the alleged good will of said Podlesaks, was merely an attempt by said Podlesaks to grant, and by said Splitdorf Electric Company and said Sumter Electrical Company to acquire the right to said Splitdorf Electric Company and said Sumter Electrical Company to designate the magneto apparatus manufactured and sold by them by the name "Podlesak", and in that way to make a pretense of having acquired the good will of your orator's business, and that the use of the said name "Podlesak" upon the magneto apparatus (Electric Generators and Ignition Devices) threatened to be sold and placed upon the market by the said Splitdorf

43 Electrical Company and Sumter Electrical Company is designed and intended by the said Podlesaks and the said Splitdorf Electric Company and the said Sumter Electrical Company to deceive, and is calculated and likely to deceive purchasers and users and to cause them to believe that the apparatus so placed upon the market by the said Splitdorf Electric Company and Sumter Electrical Company is the apparatus placed upon the market by your orator, and that the public and purchasers generally will be led to believe that the said apparatus sold and placed upon the market by the said Splitdorf Electric Company and the said Sumter Elec-

Bill of Complaint.

trical Company is apparatus made and sold by your orator, all of which is greatly to the peril of your orator's reputation and business; and from the facts herein set out your orator further charges that the said Splitdorf Electric Company and the said Sumter Electrical Company had and have a fraudulent intent too appropriate to themselves the benefit of the public demand for your orator's Electric Generators and Ignition Devices; and your orator shows that the said public demand for Electric Generators and Ignition Devices possessing the distinctive characteristics of your orator's product was created and maintained by your orator; that your orator has spent large sums of money in creating the said public demand and in so advertising the said Electric Generators and Ignition Devices under the name and in connection with the name "Podlesak" and in bringing the said apparatus to the knowledge of the public; that your orator's Electric Generators and Ignition Devices under the said name have acquired an extensive and valuable reputation throughout the United States and in foreign countries through the efforts and labors of your orator and its large expenditures of money in advertising and in advancing the sale of its said Electric Generators and Ignition Devices under the said name; and your orator has acquired a valuable property interest in and to the said name which makes the enjoyment of the use of the said name to the exclusion of the said Splitdorf Electric Company and Sumter Electrical Company of great pecuniary importance to it.

And your orator further charges that the said Henry J. Podlesak and he said Emil Podlesak have aided, abetted and encouraged the said Splitdorf Electric Company and Sumter Electrical Company in their said infringement and threatened infringement of your orator's patent rights as aforesaid, and in the proposed and threatened unfair competition of the said Splitdorf Electric Company and Sumter Electrical Company as aforesaid; and that the said Henry J. Podlesak and the said Emil Podlesak have agreed with the said Splitdorf Electric Company and Sumter Electrical Company, and propose and threaten in the future to aid, abet, encourage and assist the said Splitdorf Electric Company and Sumter Electrical Company in the said infringement and infraction of your orator's rights and in the said unfair competition with your orator.

XXIV. That when said Podlesaks and said Splitdorf

Electric Company and Sumter Electrical Company made and entered into said Splitdorf Contract, they and each of them had full knowledge of said License Contracts, and "Supplemental Agreement" (Exhibits C, D and E) between said Podlesaks and your orator, and the rights of your orator thereunder, and they and each of them well know, or should have known, that the making of the said Splitdorf Contract by said Podlesaks was a breach of their said contracts with your orator, and in violation of your orator's rights thereunder; and your orator charges that the making of said Splitdorf Contract was fraudulent and corrupt, and was made with a view to cheat and defraud your orator out of its just rights under its said contracts with the Podlesaks.

Your orator further charges that under its said contract with said Podlesaks, the said Podlesaks held the title to the patents and applications for patents embodied therein in trust for your orator, and that if said Splitdorf Contract operated to transfer the legal title to said patents and applications for patents from said Podlesaks to said Splitdorf Electric Company and Sumter Electrical Company, said Companies took such title and held and now hold the same as trustees of your orator, and that both said Podlesaks and said Splitdorf Electric Company and Sumter Electrical Company are chargeable with the duties and obligations of trustees to your orator; and your orator charges that neither said Pod-

lesaks nor said Splitdorf Electric Company nor said
46 Sumter Electrical Company has been faithful to their or its duties as such trustees for your orator, but that on the contrary, as herein more fully appears, said Podlesaks, in consideration of money paid to them by said Splitdorf Electric Company and said Sumter Electrical Company have undertaken to, and have, so far as they have been able, betrayed said trust, and said Splitdorf Electric Company and said Sumter Electrical Company, in aid of their commercial piracy, have paid large sums of money to said Podlesaks to so betray their trust; and that said Splitdorf Electric Company and Sumter Electrical Company now contemplate and intend to be faithless to and to betray the trust imposed in them as such trustees for your orator, as in this Bill of Complaint more fully appears.

XXV. That as hereinbefore appears said Splitdorf Electric Co. and Sumter Electrical Co. are acting as one person and said Sumter Electrical Company is dominated and con-

Minneapolis

St. Paul, Minn.

Bill of Complaint.

trolled by said Splitdorf Electric Co.; that said Sumter Electrical Co. has heretofore manufactured and offered for sale and is now manufacturing and offering for sale magneto ignition apparatus involving some of the inventions described and claimed in the patents included in said contracts between your orator and said Podlesaks; that your orator is informed and believes that the said Splitdorf Electric Co. and Sumter Electrical Co. propose and intend and unless prevented by the injunction of this court they will hereafter manufacture and offer for sale and sell if they can, magneto

47 ignition apparatus embodying some or all of said inventions, and that they propose and intend to designate the same by the name of "Podlesak"; that said Splitdorf Electric Company, and said Sumter Electrical Company, claim, and will continue to claim, unless prevented by such injunction, that they have a right to so manufacture and offer for sale such magneto ignition apparatus under and by virtue of the purported assignment by the Podlesaks to them in said Splitdorf Contract; but your orator charges that as said Splitdorf Electric Company and Sumter Electrical Company well knew, or should have known, said Podlesaks had no right, power or authority to give or grant such right to them; and that the attempt by said Podlesaks to give and grant such right to said Splitdorf Electric Company and Sumter Electrical Company was in breach and violation of your orator's exclusive rights as herein set forth.

XXVI. That on or about the 11th day of September, 1915, your orator received in the mail a notice and demand signed by the Sumter Electrical Company by its Solicitor and by its Attorney and Counsel, which said notice was and is as follows:

"File No. 2417

IN THE UNITED STATES DISTRICT COURT
Eastern District of South Carolina

| | |
|--|--|
| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, <i>Plaintiffs,</i> | } In Equity Letters Patent Re- issue No. 13,878. |
| <i>vs.</i> | |
| Sumter Electrical Company <i>Defendant.</i> | |

48 To Webster Electric Company,
Racine,
County of Racine,
Wisconsin.

You are hereby notified of the appearance of the Sumter Electrical Company, the defendant named in the above entitled cause, to be made of record in due course.

Please take notice that on the 4th day of September, 1915, Emil Podlesak and Henry J. Podlesak, plaintiffs named in the bill of complaint in this cause, duly executed and delivered an assignment of their entire right, title and interest in and to reissued Letters Patent No. 13,878 granted to them February 9, 1915, including the right to manufacture, use and sell the invention described and claimed therein, together with a certain other patents, applications and inventions, to the Splitdorf Electrical Company of Newark, New Jersey, and the Sumter Electrical Company of Sumter, South Carolina, the defendant named in the said Bill of Complaint, jointly. A copy of said assignment is attached hereto, and an executed original is offered for your inspection at the office of Sumter Electrical Company at 1413 Michigan Avenue, Chicago, Illinois. The original instrument will be produced in Court when necessary.

Your attention is particularly called to the fact that by virtue of this assignment, the Sumter Electrical Company, named as defendant in the bill of complaint filed in this cause, now stands in the place and possessed of all rights of Emil Podlesak and Henry J. Podlesak, named as plaintiff therein, with respect to the matter alleged in the
49 bill, and including both the rights to manufacture, use and sell, and the right to recover for past infringement. You are requested to take immediate steps to dismiss the

Bill of Complaint.

aforesaid bill of complaint and terminate these proceedings, without the Sumter Electrical Company being put to the expense and trouble of answering the same; in default of which application will be made to the Court in due course for costs. In this connection your attention is called particularly to the fact that the Sumter Electrical Company, by virtue of the foregoing assignment, has acquired the rights of the said Emil Podlesak and Henry J. Podlesak under their previous license agreements with your company, one of which is the right to be relieved of all costs and expenses of suits brought by you for infringement of their patents.

You are further notified to account to the aforesaid Splitdorf Electric Company and Sumter Electrical Company, and to render payment to them of all royalties accruing on and after the 4th day of September, 1915, under the three several license agreements between your company and Emil Podlesak and Henry J. Podlesak referred to in the aforesaid assignment as Exhibits A, B and C, Exhibit B being also pleaded in the third paragraph of the bill of complaint filed by you in the hereinbefore entitled cause.

You are further notified that in default of immediate dismissal of the bill on your motion, application will be made to the Court in behalf of the Sumter Electrical Company to increase the amount of costs to be secured, under Rule 50 205 of the Rules of Practice in the District Courts of the United States for the Eastern and Western Districts of South Carolina.

SUMTER ELECTRICAL COMPANY.

By HARMON D. MOISE

Solicitor,
Sumter, S. C.

EDWARD E. CLEMENT,

Attorney and Counsel,

McLachlen Bldg.,

Washington, D. C."

The the caption appearing at the top of the said notice if the caption and title of the suit commenced by the said Emil Podlesak and Henry Joseph Podlesak and your orator, Plaintiffs, against the Sumter Electrical Company, Defendants, hereinabove referred to, and in which process was served upon the said Sumter Electrical Company on or about the 25th Day of August 1915; that attached to the said notice was a paper purporting to be a true copy of the said Split-

dorf Contract, hereinbefore referred to, and a copy of which is hereto attached as "Exhibit F".

That on the 23rd day of September 1915 the said suit of Podlesak et al vs. Sumter Electrical Company was, by order of Court, dismissed and discontinued without prejudice to the rights of any of the parties thereto.

XXVII. That the attorneys and solicitors duly appointed and constituted by your orator in the matter of all of the patent litigation heretofore commenced or contemplated by your orator under and relating to any and all of the said Podlesak patents hereinabove set forth are and have been Lynn A. Williams, of Chicago, Illinois, and the firm of Williams & Bradbury, of Chicago, Illinois, comprised of the said

Lynn A. Williams and Clifford C. Bradbury, of Chicago, 51 Illinois; and in the matter of the suit commenced in the

United States District Court for the Eastern District of South Carolina by Emil Podlesak, Henry Joseph Podlesak and your orator, plaintiffs, versus Sumter Electrical Company, defendant, on or about the 24th day of August, 1915 hereinabove referred to, the firm of Smythe and Visanski, of Charleston, South Carolina, were by your orator duly appointed and constituted Local Counsel and Solicitors; that the appointment of the said attorneys, solicitors, and counsel for your orator in the aforesaid matters is and was for a long time past fully known to the said Emil Podlesak and the said Henry Joseph Podlesak, and to the said Splitdorf Electric Company and the said Sumter Electrical Company;

That in due course of transmission by mail, or telegraph, as the case may have been, the said attorneys, solicitors, and counsel for your orator duly received from the said Splitdorf Electric Company and the said Sumter Electrical Company, or their agents, letters and telegrams as follows:

"Western Union Telegram

Sumter, S. C., Sept. 17, 15.

Lynn A. Williams, Attorney,

719 Monadnock Block, Chicago.

Sumter Electrical Co. hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry J. Podlesak to you or any other as attorney for Webster Elec. Co. et al versus Sumter Elec. Co.

SUMTER ELEC. CO.

By CHAS. T. MASON,
Prest."

Bill of Complaint.

"Sumter Electrical Company.

Sumter, S. C. 9/17/15.

Lynn A. Williams, Atty. at Law,
719 Monadnock Block,
Chicago, Ill.

Dear Sir:

Enclosed herewith you will find copy of telegram
52 we have just sent you.

We wish to confirm this telegram as follows:

"Sumter Electrical Company hereby revoke all agency and
power of attorney heretofore executed by Emil Podlesak and
Henry J. Podlesak, to you or any other as attorney for Web-
ste Electric Company, et al, versus Sumter Electrical Com-
pany"

Yours very truly,

SUMTER ELECTRICAL COMPANY,

By C. T. MASON,

President."

HRV/IB

Attest:—

E. H. RHAME,

Asst. Sec."

(Enclosure)

Western Union Day Letter

Sumter, S. C. Sept. 17th, 1915.

Lynn A. Williams, Atty. at Law,
719 Monadnock Block,
Chicago, Ill.

Sumter Electrical Company hereby revoke all agency and
power of attorney heretofore executed by Emil Podlesak and
Henry J. Podlesak to you or any other attorney for Webster
Electric Company et al versus Sumter Electrical Company.

SUMTER ELECTRICAL COMPANY,

By CHAS. T. MASON,

President.

Paid: S. E. C.

4.50 P. M.

9/17/15.

Attest:

E. H. RHAME,

Asst. Sec."

“Sumter Electrical Company

Sumter, S. C. 9/17/15.

Smythe & Visanska, Atts. at Law,

Charleston, S. C.

Gentlemen:

53 Enclosed herewith you will find copy of telegram which we have just sent you.

We wish to confirm this telegram as follows:

“Sumter Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry J. Podlesak, to you or any other attorney for Webster Electric Company, et al versus Sumter Electrical Company”

Yours very truly,

SUMTER ELECTRICAL COMPANY,

By C. T. MASON,

President.

HRV/IB

Attest:—

E. H. RHAME,

Asst. Sec.”

“Western Union Telegram

Newark, N. J., Sept. 18, '15

Smythe and Visanska,

Charleston, C. C.

Splitdorf Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry Joe Podlesak to you or any other as attorney for Webster Electric Co. et al versus Sumter Electrical Company.

SPLITDORF ELECTRICAL CO.,

J. F. ALVORD,

Prest.”

“Western Union Telegram

Newark, N. J., Sept. 18, '15

Lynn A. Williams,

719 Monadnock Block,

Chicago, Ill.

Splitdorf Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry Joe Podlesak to you or any other as attorney for Webster Electric Company et al versus Sumter Electrical Company.

SPLITDORF ELECTRICAL CO.,

J. F. ALVORD,

President.”

Bill of Complaint.

"Splitdorf Electrical Company

Newark, N. J., Sept. 18, 1915.

Mr. Lynn A. Williams, Atty. at Law,

719 Monadnock Block,

Chicago, Ill.

Dear Sir:—

Enclosed herewith you will find copy of telegram which we sent you this day, which we wish to confirm as follows:

"Splitdorf Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry J. Podlesak, to you or any other as attorney for Webster Electric Company et al versus Sumter Electrical Company."

Yours very truly,

SPLITDORF ELECTRICAL CO.

JOHN F. ALVORD,

President.

M. W. BARTLETT,

Secy.

(Corporate Seal)

MWB*TSW

(Enclosure)

"Western Union Telegram

September 18, 1915.

Lynn A. Williams,

719 Monadnock Block,

Chicago, Ill.

Splitdorf Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry Joe Podlesak to you or any other as attorney for Webster Electric Company et al versus Sumter Electrical Company.

SPLITDORF ELECTRICAL COMPANY

J. F. ALVORD,

President.

MWB*TSW

9:15 A. M.

XXVIII. That under and pursuant to said contracts with the said Podlesaks your orator is obliged to furnish
 55 to said Podlesaks on or before October 15th, 1915, and on or before the 15th of January, April, July and October in each year thereafter during the life of the said contracts a report showing the total number and selling price of devices embodying the improvements described and claimed in the

patents covered by such contracts for the quarter of a year ending September 30th, 1915; and by said contracts it is provided that your orator's books of account shall be open to the inspection of said Podlesaks or their attorney or agent at all reasonable times; that the only purpose of such provisions was to enable said Podlesaks to ascertain and verify the amount of license fees or royalties to be paid to them by your orator; that said Splitdorf Electric Company and Sumter Electrical Company claims that, under and by virtue of said Splitdorf contract, they now have the right to receive such reports and examine your orator's books of account, and that it is a part of the fraudulent arrangement and conspiracy hereinbefore referred to between the said Splitdorf Electric Company and Sumter Electrical Company and said Podlesaks, that said Company shall receive such reports and examine your orator's books, directly, or indirectly through said Podlesaks or some attorney or agent designated by them; that the main object and purpose of said Splitdorf Electric Company and Sumter Electrical Company, in procuring such reports and examining your orator's books, is not to ascertain and verify the amount of royalties payable by your orator, but is to pry into and get the secrets of your orator's business, the names and locations of your orator's customers,
56 the amount of business done with them and the prices at which your orator's products are sold to them, to the end that the said Splitdorf Electric Company and said Sumter Electrical Company may fraudulently, unfairly and unjustly interfere with the trade and business of your orator, and injure, and, if possible, ruin the same.

Your orator is ready, able and willing to pay to whomever may be entitled thereto, all license fees and royalties payable by it under its said contracts; but your orator alleges that in equity it ought not to be compelled to furnish such reports to said Splitdorf Electric Company and Sumter Electrical Company or allow them to examine its books, and that said Podlesaks ought not to be permitted, directly or indirectly, to furnish to said Splitdorf Electric Company, or said Sumter Electrical Company said reports, or any information gathered by them from the books of your orator; and your orator offers to make such reports, and to allow said books to be examined under the direction and control of this court, but asks that the court adopt and prescribe such protections with respect to such reports and the examination of your orator's

books as will protect your orator against the fraudulent plans and schemes of said Podlesaks and said Splitdorf Electric Company and Sumter Electrical Company herein set forth. That it is part and parcel of said fraudulent arrangement and conspiracy between said Podlesaks and said Splitdorf Electric Company and Sumter Electrical Company that said Companies, by making use of the information which they would gain if permitted to receive said reports from your orator and examine its books, and making use of the inventions described and claimed in said Letters Patent and applications for Letters Patent, to interfere with and cripple your orator's business to such an extent that your orator would not be able to comply with the terms and agreements contained in its said contracts with said Podlesaks, on its part to be performed; and that in consequence thereof, your orator will be obliged to make default under said contracts, and that thereupon said Podlesaks and said Splitdorf Electric Company and Sumter Electrical Company will undertake to terminate said contracts and all the rights of your orator thereunder; and that by that means in that way, said Splitdorf Electric Company and Sumter Electrical Company will endeavor to get and acquire all of the rights of your orator under said contracts, for the benefit of themselves and said Podlesaks; and your orator alleges that there is grave danger that said Podlesaks and said Splitdorf Electric Company and Sumter Electrical Company will be able to carry out and consummate their said fraudulent plan and conspiracy unless they are prevented by this court from doing so; and your orator alleges that if said Podlesaks and said Splitdorf Electric Company and Sumter Electrical Company proceed to carry out and consummate their said fraudulent plan and scheme, your orator will be irreparably injured, and that the amount of damage and injury which your orator will sustain will not be capable of accurate or even approximate estimation by the processes of the common law, and that your orator has no adequate remedy at law.

58 XXIX. That it is essential to your orator's business and the protection of its rights under its contracts with the Podlesaks, that it should have the right to institute and maintain and control litigation to prevent the infringement of the patents covered by its said contracts; that, pursuant to, and as part and parcel of their said fraudulent arrangement and conspiracy, said Podlesaks and said Splitdorf Elec-

tric Company and Sumter Electrical Company have planned and arranged to defeat any and all such litigation by your orator, and to prevent your orator from instituting and maintaining the same; and that said Splitdorf Electric Company and Sumter Electrical Company have notified your orator that they will cause such litigation instituted by your orator to be dismissed; that in and by its said contracts with the Podlesaks, as said Splitdorf Electric Company and Sumter Electrical Company well knew when they entered into said Splitdorf Contract; your orator had and has the right to use the names of said Podlesaks, if so desired by your orator, in such litigation; and your orator further charges that unless prevented by the injunction of this court, said Splitdorf Electric Company and Sumter Electrical Company will attempt to intervene in any and all such litigation instituted by your orator and harrass and annoy your orator and endeavor to defeat its rights with respect thereto.

XXX. That your orator's business, until the last year, has not been profitable, but has sustained considerable losses, which have been made good from time to time, to a large extent, by its stockholders; that during the last year its 59 business has been more profitable, but your orator has never at any time been able to, and is not now able to pay its stockholders any dividends; that while he was employed by your orator, said Emil Podlesak received in the aggregate, as such employe, more than Seventeen Thousand Dollars (\$17,000.00), which was an aggregate sum larger than that ever received for services rendered by any other employe or officer of your orator; and in addition to the foregoing, said Emil Podlesak and Henry Joseph Podlesak have received from your orator in royalties and license fees more than Twenty-three Thousand Dollars (\$23,000.00); that on or about the 4th day of May, A. D. 1915, said Emil Podlesak tendered his resignation as an employe of your orator, and shortly thereafter ceased to be an employe of your orator; that as your orator is informed and believes, since his resignation, said Emil Podlesak has frequently boasted that he would bring about injury and distress to your orator, and that in the end he would be reinstated as an employe of your orator, but not under the management and control of its present stockholders or officers, meaning that he would bring your orator to such a condition that it would be obliged to sell out or turn over its business to some of its competitors; and your orator charges that said Emil Podlesak and Henry

Joseph Podlesak have entered into and made the said fraudulent arrangement and conspiracy with the Splitdorf Electric Company and Sumter Electrical Company in connection with the plans of said Emil Podlesak to ruin your orator's business as herein stated.

61 XXXI. That your orator is informed and believes and so states the fact to be, that the said Podlesaks and the said Splitdorf Electric Company and Sumter Electrical Company are prepared and ready to continue their said infringement and unfair competition, and unless the said Podlesaks and the said Splitdorf Electric Company and Sumter Electrical Company are restrained from so doing, your orator will suffer further great and irreparable damage from the said unlawful acts.

XXXII. That by reason of the premises your orator has been greatly injured and damaged in the sum of more than Three Thousand Dollars (\$3,000.00); and your orator further alleges that the value of your orator's rights under the Podlesak patents hereinbefore set forth is far in excess of the sum of Three Thousand Dollars (\$3,000.00).

XXXIII. That your orator's remedy for the matters and thing hereinbefore complained of is only cognizable in a court of equity.

XXXIV. To the end therefore that the said Henry J. Podlesak and the said Emil Podlesak, and the said Splitdorf Electric Company and Sumter Electrical Company may, if they can, show reason why your orator should not have relief, may it please your Honors to bring said defendants before this court by process of subpoena, there to make full, true, direct and perfect answer to the several matters and things herein set forth and charged (though not under oath, answer under oath being hereby expressly waived); and
62 that they be decreed to account for any pay over to your orator the amount of your orator's damages and a sum in excess thereof not exceeding three times the actual damages, and as well the income and profits thus unlawfully derived, or which might and otherwise would have accrued to your orator but for the unlawful and wrongful acts of the said defendants as hereinabove set forth; and that said Splitdorf Electric Company and Sumter Electrical Company be required to produce their full records and accounts of all kinds touching upon and concerning their unlawful and unauthorized acts as aforesaid, for the guidance of the court

in determining the amount justly due to your orator in consequence thereof; and further that the said Podlesaks and the said Splitdorf Electric Company and Sumter Electrical Company may be restrained from any further violation of your orator's rights in the premises, may it please your Honors to grant a writ of injunction issuing from and under the seal of this Honorable Court, perpetually enjoining and restraining said Podlesaks and said Splitdorf Electric Company and Sumter Electrical Company, their officers, employes, attorneys, agents and representatives of every kind and grade, from further manufacture, use or sale, or in any manner or in attempts thereat, or offers, negotiation or encouragement theretowards, in violation of your orator's rights as aforesaid; that the rights and duties of said defendants, and

63 each of them, under said License Contracts and said

Supplemental Agreement between your orator and said Podlesaks be ascertained and declared; that the said defendants and each of them be held and declared to occupy a relation of trust to your orator with respect to said inventions, applications for patents and patents; that said Splitdorf Contract to the extent that the same interferes with and is in opposition to the rights of your orator be held to be declared fraudulent and void; that some proper person be appointed and authorized to receive all reports and to examine your orator's books for the purpose of verifying the amount of license fees and royalties which your orator should pay from time to time under its said license contracts and said Supplemental Agreement, to receive, hold and distribute in accordance with the order of this Court any and all royalties and license fees payable by your orator thereunder; that said Podlesaks and each of them be enjoined and restrained from communicating to said Splitdorf Electric Company and Sumter Electrical Company, or either of them, or any of their officers, agents, attorneys or representatives, any information

which said Podlesaks have derived, or may derive, from
64 reports furnished to them, or to be furnished, by your orator, or from any examination or examinations of your orator's books of account, or from communicating any information which they or either of them have derived by virtue or in consequence of said Emil Podlesak's having been in the employment of your orator; that said defendants and each of them be enjoined and restrained from interfering with the customers of your orator or of your orator's trade with them, and from representing to them, or any of them,

or to others, that said Splitdorf Electric Company or Sumter Electrical Company has the right to manufacture, sell or use the inventions, or any or either of the inventions, described, set forth and claimed in the Podlesak applications for patents, or letters patent set forth and referred to in the said License Contracts between your orator and said Podlesaks; that said Splitdorf Electric Company and Sumter Electrical Company be enjoined and restrained from embodying the inventions, or any of the inventions, described, set forth and claimed in any or all of the aforesaid Podlesak patents in any Electric Generator or Ignition Device, or any device manufactured, used, sold or dealt in by them or either of them, and from placing upon or connecting with any such

Magneto Electric Generator or Ignition Device or Apparatus the name of "Podlesak"; that the defendants and each of them be enjoined and restrained from interfering with any litigation heretofore or subsequently instituted by your orator to enforce its rights under said License Contracts or under said Podlesak patents; and that said Podlesaks and each of them, and said Splitdorf Electric Company and Sumter Electrical Company, and some or each or all of them, be ordered and directed to allow your orator to use their name or names so far as may be necessary or convenient in instituting and maintaining any such litigation that the Court hold and declare and decree that said Splitdorf Electric Company and Sumter Electrical Company have not, and neither of them has, under and by virtue of said Splitdorf Contract or otherwise, any right to make, use or sell, or deal in Electric Generators, Ignition Devices, or other apparatus embodying the inventions described, set forth and claimed in the aforesaid Podlesak patents and included and embraced in the said License Contracts between your orator and said Podlesaks; and that they and each of them be enjoined from doing or attempting so to do.

And for the further protection of its rights, your orator prays that a provisional or temporary injunction or restraining order be issued commanding and restraining the defendants, their officers, employes, attorneys, agents and representatives of every kind and grade as aforesaid pending this cause; and that the relief prayed as to the appointment of some proper person to receive reports and to examine your orator's books, and to receive and hold and distribute royalties as aforesaid be granted provisionally or temporarily pending this cause; and your orator further

prays for such other and further relief as the equities of the case may require and as shall be agreeable to equity and good conscience and to your Honors may seem meet: and as in duty bound your orator will ever pray, etc.

WEBSTER ELECTRIC COMPANY,

By TOWNER K. WEBSTER

President.

LYNN A. WILLIAMS, CLIFFORD C. BRADBURY
LEVINSON, BECKER, CLEVELAND & SCHWARTZ
Solicitors for Complainant.

State of Illinois, }
County of Cook } ss.

TOWNER K. WEBSTER, being first duly sworn, deposes and says that he is President of the Webster Electric Company, the complainant in the above entitled cause; that he has read the foregoing Bill of Complaint subscribed by 67 him on behalf of the Webster Electric Company, the complainant therein named, and knows the contents thereof, and that the same is true of his own knowledge except such matters as are stated to be on information and belief, and as to these he believes it to be true.

T. K. WEBSTER

Subscribed and sworn to before me at Chicago, Illinois, this 11 day of October, 1915.

MARY A. COOK

Notary Public.

EXHIBIT A.

License Agreement.

This Agreement Made and entered into this 2nd day of Nov. 1908, by and between Tesla Emil Podlesak of Morristown, New Jersey and Henry Joseph Podlesak, of Chicago, Illinois, hereinafter called the parties of the first part, and the Webster Mfg. Co. an Illinois Corporation, of Chicago, Illinois, hereinafter called the party of the second part, Witnesseth:

That Whereas the parties of the first part have invented certain new and useful Improvement in Inductor Electric

Generators for Internal Combustion Motor Ignitors, for which they filed their original application for Letters Patent of the United States, Serial No. 76,559, for September 25, 1901, and which original application has been divided, and the Divisional Applications, Serial Nos. 413,068, 413,069, and 413,070 were filed on the 28th day of January, 1908, and which said original application and divisional applications are now pending.

And Whereas, the party of the second part is desirous of securing the exclusive right and license to manufacture, use, and sell the inventions and improvements described and claimed in said original applications and each and every of the divisional applications above referred to, and to bring and maintain suit against infringers of the patent right upon said inventions within and throughout the United States and territories thereof, and for and during the life of any patent or patents which may be granted upon the said application, or either or any of them or for the inventions or improvements described or shown or claimed in said original and
69 divisional applications, and each of them.

Now, Therefore, in consideration of One Dollar (1.00) by the party of the second part to the parties of the first part in hand paid, and of the covenants and agreements of the party of the second part hereinafter expressed and to be kept and performed, the parties of the first part do hereby grant unto the party of the second part the exclusive right and license to manufacture, use, and sell the inventions or improvements, and each and every of them, described, set forth, and claimed in said original application Serial No. 76,559, and in said divisional application Serial Nos. 413,068, 413,069 and 413,070 within and throughout the United States and the territories and possessions thereof, for and during the term of any patent or patents which may be granted upon said original applications or any of the divisions thereof; and the parties of the first part agree that they have good right and lawful authority to grant said exclusive license, and that they have not heretofore parted with any right license villege inconsistent therewith, and that they will not, while this exclusive license to the party of the second part is in force, either make, use, or sell said inventions, or grant, permit, or encourage others to do so.

Second: The parties of the first part agree to and with the party of the second part that they and each of them will aid and assist the party of the second part in the prose-

cution of the said applications and the obtaining of patents thereon, and in any interference proceeding relating to their right of priority to said inventions, and in any suit or proceeding brought under any patent to be granted there-
70 for, or for infringement of any patent other than those resulting from the Podlesak applications heretofore mentioned by reason of the manufacture, use or sale by the party of the second part of the inventions described in said applications; provided, however, that said parties of the first part shall not be called upon to pay out or expend any money in the prosecution of said applications, or in any suit or proceeding relating to the said inventions. And the parties of the first part hereby appoint the attorney for the party of the second part as their agent and attorney for the purpose of joining them as parties complainant where necessary or desirable, in any suit which the party of the second part may wish to bring on account of the infringement of any letter patent which may be granted upon the aforesaid applications, the said attorney for the party of the second part to have the power to execute as the attorney and agent of the parties of the first part any papers which may be necessary or convenient to the commencement and maintenance of any such suit, it being expressly understood and agreed, however, that the parties of the first part are not to be put to any expense or to be required to expend any moneys on account of any such infringement suits to which they may be made parties complainant, and it is expressly understood and agreed further that the said parties of the first part shall be exempt from liability in damages or court costs resulting from any law suit in which the parties of the first part may thus be joined with the party of the second part.

Third: The party of the second part agrees to mark each of the devices manufactured under this license-agree-
71 ment, with the words "Patented" and with the date of any patents resulting from the aforesaid applications which contain claims readable upon such devices.

Fourth: The party of the second part agrees to keep a correct account of all devices made and sold under this license, whether sold as a part of and attached to other machines or apparatus or not so attached, containing or embodying the said improvements or inventions, or any of them which books of account shall be open to the inspection of the parties of the first part at all reasonable times.

Fifth: The party of the second part further agrees that on and after the issue of any letters patent upon any of the aforesaid applications, or on or after the sale of any of the articles manufactured and sold under any of the aforesaid applications, if sold before the issue of the letters patent, to make quarterly reports in writing to the parties of the first part, said reports to cover the periods terminating respectively upon the last days of September, December, March and June, of each year, each report to be furnished within fifteen days from the termination of the period covered thereby, and showing the total number of the devices embodying such inventions or improvements, or any of them, which it has sold and delivered as above stated, during the preceding quarter, which reports shall be verified by the oath or affidavit of the president or some other officer of the company or corporation comprising the party of the second part.

Sixth: The party of the second part agrees that it will on the day of each and every report pay to the parties 72 of the second part jointly, as a royalty or license fee, (5%) five per cent of all moneys, or the equivalent thereof, which they may have received or that be due them from the sales of or in exchange for the devices made and sold during the preceding quarter or during that part of the first such quarter during which the patent resulting from said applications or any of them, have been in force or during which any articles shall be manufactured and sold under said applications or any of them if sold before the issue of letters patent, and it is agreed that the said devices are not be sold for less than a fair and reasonable price based upon manufacturing and trade conditions.

Seventh: If the party of the second part shall fail to keep accounts, make report and pay royalties as hereinbefore provided, or if the party of the second part shall, during the life of this agreement, manufacture and place upon the market so-called low-tension or make-and-break ignition apparatus for internal combustion engines not coming within the scope of the patents which may be secured upon the aforesaid patent applications, and which may compete with and interfere with the sales of apparatus manufactured under the claims of the aforesaid applications, or the patents which may result therefrom, or if during the year ending upon the last day of October 1909, the royalties agreed to be paid under this contract shall not amount to Two Hundred Dollars

(\$200.00), or if during the year ending on the last day of October, 1910, the royalties agreed to be paid under this contract shall not amount to Three Hundred Dollars
73 (\$300.00); or if during the year ending upon the last day of October, 1911, the royalties agreed to be paid under this contract shall not amount to Four Hundred Dollars (\$400.00), or if during the year ending upon the last day of October, 1912, the royalties agreed to be paid under this contract shall not amount to Five Hundred Dollars (\$500.00); or if during the year ending upon the last day of October, 1913, the royalties agreed to be paid under this contract shall not amount to Six Hundred Dollars (\$600.00); or if during the year ending upon the last day of October, 1914, the royalties agreed to be paid under this contract shall not amount to Seven Hundred Dollars (\$700.00); or if during the year ending upon the last day of October, 1915, the royalties agreed to be paid under this contract shall not amount to Eight Hundred Dollars (\$800.00); or if during the year ending upon the last day of October, 1916, the royalties agreed to be paid under this contract shall not amount to Nine Hundred Dollars (\$900.00); or if during the year ending upon the last day of October in any subsequent year, during the life of this contract, the royalties agreed to be paid under this contract shall not amount to One Thousand Dollars (\$1,000.00), it being understood that in the event of any deficiency in the amount of royalties earned as figured on the basis of sales made, the party of the second part may make up any such deficiency so that the total amount paid at the end of the said years shall not be less than the above mentioned minimum amount for that year; then the parties of the first part shall have the
74 right to give notice in writing to the party of the second part of its defaults, specifying in the said notice the respect or particular in which said second party is claimed to be in default, and if said second party shall not, within thirty days after the receipt of said notice, remedy or remove said default, if one there be, the parties of the first part may, in case they so desire to do, thereupon terminate said license by notice in writing to the party of the second part, but such notice of termination shall not relieve the party of the second part from the payment of any and all royalties and guaranteed amounts accrued prior to the receipt of such notice of termination.

Eighth: The party of the second part agrees that it will

diligently proceed in and about the business of making and offering for sale the inventions and improvements covered by this license; that it will advertise the same, and use all proper and reasonable efforts to create a demand therefor, and to supply the demand when created.

Finally: It is agreed that this agreement shall extend to and be binding upon the heirs, assigns, and legal representatives of the parties of the first part, and the successors and assigns of the party of the second part.

In Witness Whereof, the parties of the first part have hereunto set their hands and seals, and the party of the second part has caused its corporate name to be hereto signed by its President, and its corporate seal attested by its
75 Secretary to be hereunto affixed, all as of the day and year first above written.

TESLA EMIL PODLESAK ()

HENRY JOSEPH PODLESAK ()

WEBSTER MFG. CO.,

By T. K. WEBSTER

President.

(Seal)

Attest:

JOHN H. LENOX

Secretary.

Witness

L. F. KITCHELL

PAULINE PODLESAK

"EXHIBIT B."

Agreement

This Agreement, made and entered into on the 17th day of August, 1912, by and between Henry J. Podlesak, of Chicago, Illinois, hereinafter called the party of the first part, and Emil Podlesak of Tiffin, Ohio, hereinafter called the party of the second part, Witnesseth:—

That, in consideration of One Dollar (\$1.00) by the Party of the second part to the party of the first part into hand paid, the party of the first part does hereby sell and give to, and agrees to execute formal assignment papers when called upon to do so by, the party of the second part Forty-nine One-hundredths (49/100) of his entire interest in the below identified U. S. Letters-Patents and any such other patents

as may be granted and issued upon the below identified, pending, applications for U. S. Letters-Patents, To-Wit:—

No. 1,034,645, Aug. 6, 1912—Elect. Ignition Devices—Podlesak, H. J.

No. 1,006,678, Oct. 24, 1911—Ignition Systems—Podlesak, H. J.

No. 1,019,354, Mar. 5, 1912—Explosive Engines—Podlesak, H. J.

No. 1,037,526, Sept. 3, 1912—Explosive Engines—Podlesak, H. J.

No. 1,022,642, Apr. 9, 1912—Low Tension Spark Mach. Podlesak, H. J.

No. 947,647, Jan. 25, 1910,—Ind. Gen. for Ign. Purposes—Podlesak et al

No. 948,483, Feb. 8, 1910,—Ind. Gen. for Ign. Purposes—Podlesak et al

No. 1,003,649, Sept. 19, 1911—Ind. Gen. for Ign. Purposes—Podlesak et al

No. 1,056,360, Mar. 18, 1913—Ind. Gen. for Ign. Purposes—Podlesak et al

S. N. 618,483, filed Mar. 31/11—Ind. Gen. Ign. Purposes—Podlesak, H. J.

And the party of the first part agrees that he has good right and lawful authority to sell and give his entire rights or any portion thereof in the above identified patents and applications for patents.

2. And further, that in consideration of One Dollar (\$1.00) by the party of the first part to the party of the second part into hand paid, the party of the second part does hereby sell and give to, and agrees to execute formal assignment papers when called upon to, do so by, the party of the first part Fifty-one One-hundredths ($51/100$) of his entire interest, rights, in the below identified U. S. Letters-Patents and any such other patents as may be granted and issued upon the below identified applications, pending for U. S. Letters-Patents, To-Wit:

No. 1,003,501, Sept. 19, 1911—Speed Governors—Podlesak, Emil

No. 1,055,076, Mar. 4, 1913—Current Gen. & Ignitor, Etc. Podlesak, E.

No. 947,647 Jan. 25, 1910—Ind. Gen. for Ign. Purposes—Podlesak et al

No. 948,483 Feb. 8, 1910—Ind. Gen. for Ign. Purposes—Podlesak et al

No. 1,003,649, Sept. 19, 1911—Ind. Gen. for Ign. Purposes—Podlesak et al

No. 1,056,360, Mar. 18, 1913—Ind. Gen. for Ign. Purposes—Podlesak et al

S. N. 632,377, filed June 10/11—Electric Generators,—Podlesak, Emil

S. N. 639,738, filed July 21/11—Magneto Machines—Podlesak, Emil

S. N. 668,153, filed Dec. 27/11—Magneto Machines—Podlesak, Emil

S. N. 734,143, filed Nov. 29/12—Ign. Dev. for Explo. Eng.—Podlesak, Emil

and the party of the second part agrees that he has good right and lawful authority to sell and give his entire right or any portion thereof in the above identified patents and applications for patents.

3. It is further agreed that the formal assignment papers may, if necessary or advisable, be made and executed in respect to any one or more of the herein identified patents or patents that may issue on any of the herein identified applications for patents, this prior to such time when all of said pending applications have matured into patents or have been abandoned.

77 Page 2—Agreement—H. J. & E. Podlesak—Aug. 17, 1912.

4. It is further agreed that the party of the first part and the party of the second part shall each receive Fifty-Hundredths (50/100) of all the moneys and such other valuable considerations that may be obtained and received as net proceeds from the sale of any or all, of the above identified patents and applications for patents.

5. It is further agreed that the expenses of any suit or litigation that may be brought because of infringement of any of the above identified patents, and any patent that may be granted and issued on any of the above identified applications, shall be equally borne by each of the party hereto; provided, that both parties hereto agree to join together as party complainants before any such is commenced.

6. It is further agreed that the expenses of prosecuting the above identified pending applications for Letters-Patents shall be borne equally by each of the party hereto.

7. It is lastly agreed that the covenants herein shall be binding upon the heirs, assigns, and legal representatives of the parties hereto, and that all prior agreements by and between the parties hereto in respect to any of the above identified patents or applications relating thereto are hereby terminated and cancelled.

In presence of:

HENRY J. PODLESAK,
Party of the first part.

In presence of:

EMIL PODLESAK,
Party of the second part.

State of Illinois }
County of Cook } ss

On this 4th day of May, 1915, personally appeared before us Henry J. Podlesak, personally known to me to be the same person described in and who executed the foregoing assignment and agreement, and who acknowledged to me that he executed the same for the uses and purposes therein mentioned.

Witness my hand and notarial seal the day and year last above written.

(Seal) MARY A. COOK
Notary Public.

State of Illinois }
County of Cook } 'ss

On this 4th day of May, 1915, personally appeared before me Emil Podlesak, to me known to be the same person described in and who executed the foregoing assignment and agreement, and who acknowledged to me that executed the same for the uses and purposes therein mentioned.

Witness my hand and notarial seal the day and year last above written.

(Seal) MARY A. COOK
Notary Public.

(EXHIBIT C)

License Agreement.

This Agreement made and entered into this 5th day of February, 1914, by and between Emil Podlesak of Racine, Wisconsin, and Henry Joseph Podlesak of Chicago, Illinois, hereinafter called the parties of the first part, and The Webster Electric Company, a corporation of the State of West Virginia, whose principal office is in the City of Chicago, County of Cook, and State of Illinois, hereinafter called the party of the second part, Witnesseth:

That Whereas the parties of the first part, having invented certain new and useful improvements in Inductor Electric Generators for Internal Combustion Motor Ignition, for which certain Letters-Patent of the United States of America have been granted, which all they jointly own, to-wit:—

Number 947,647, issued January 25th, 1910 Inductor Generators for Ignition purposes.

Number 948,483, issued February 8th, 1910, Inductor Generators for Ignition Purposes,

Number 1,003,649 issued September 19th, 1911, Inductor Generators for Ignition purposes.

And Whereas the party of the second part is desirous of securing exclusive right and license to manufacture, use and sell the inventions and improvements, described and claimed in above said patents, all or any of them, the validity of which is admitted, and to bring and maintain suits against infringers of the patent rights covering the said inventions, within and throughout the United States of America and Territories thereof, and for and during the life of any and all of the patents:

79 Now, Therefore, in considerations of the One Dollar (\$1.00) by the party of the second part to the parties of the first part, in hand paid and of the covenants and agreements of the party of the second part, hereinafter expressed and to be kept and performed, the parties of the first part do hereby grant unto the party of the second part, the exclusive right and license to manufacture, use and sell the inventions or improvements, and each and every one of them, described, set forth and claimed in said patents, numbers 947,647, 948,483, and 1,003,649, within and throughout the United States of America and Territories and Possessions thereof, for and

during the term of said patents or any of them; and the parties of the first part agree that they have good right and lawful authority to grant said exclusive license, and that they have not heretofore parted with any right, license or privilege inconsistent therewith, and that they will not, while this exclusive license to the party of the second part is in force, make, use or sell said inventions or grant, or give permission to, or encourage, others to do so.

Second: The parties of the first part agree to and with the party of the second part that they and each of them will aid and assist the party of the second part in any suit or proceeding brought under any of the said patents, or for the infringement of any patents by reason of the manufacture, use or sale, by the party of the second part of the inventions described in said patents; provided, however, that said parties of the first part shall not be called upon to pay out or expend any money in any suit or proceeding relating to the said inventions, and the parties of the first part hereby appoint

80 the attorney for the party of the second part as their agent and attorney for the purpose of joining them as parties complainant where necessary desirable, in any suit which the party of the second part may wish to bring on account of the infringement of any of said letters-patent, the said attorney for the party of the second part to have the power to execute as the attorney and agent of the parties of the first part any papers which may be necessary or convenient to the commencement and maintenance of any such suit, it being expressly understood and agreed, however, that the parties of the first part are not to be put to any expense or to be required to expend any moneys, on account of any such infringement suits to which they may be made parties complainant, and it is expressly understood and agreed, further, that the said parties of the first part shall be exempt from liability in damages or court costs resulting from any law suits in which the parties of the first part may thus be joined with the party of the second part, the party of the second part agreeing to assume the payment of any and all damages and court costs that may result from any such suits.

Third: The party of the second part agrees to mark each of the devices manufactured under this license agreement, with the words "Patented" with the surname of the invent-

ors, and with the dates of any of the said patents containing claims readable upon such devices.

Fourth: The party of the second part agrees to keep a correct account of all devices made and sold under this license whether sold as a part of and attached to others machines or apparatus or not so attached, containing or embodying the above said improvements or inventions, or
81 any of them which books of account shall be open to the inspection of the parties of the first part or their attorney or agent at all reasonable times.

Fifth: The party of the second part further agrees to make quarterly reports, in writing, to the parties of the first part, said reports to cover periods terminating respectively upon the last days of September, December, March and June of each year, each report to be furnished within fifteen days from the termination of the period covered thereby, and showing the total number and selling prices of devices embodying the improvements shown and claimed in said patents or any of them, which it has sold and delivered as above stated, during the preceeding quarter, which report, when required, shall be verified by the oath or affidavit of the president or some officer of the company or corporation comprising the party of the second part.

Sixth: The party of the second part agree that it will on the day of each and every report pay to the parties of the first part, jointly, as a royalty or license fee, five per cent (5%) of all moneys or the equivalent thereof, which they may have received or that may be due them from the sales of or in exchange for the said devices sold and delivered during the preceding quarter. It is further expressly understood and agreed that the said devices manufactured embodying above improvements, or any of them, are not to be sold for less than a fair and reasonable price, based upon manufacturing and trade conditions.

Seventh: If the party of the second part fails to keep accounts, make reports and pay royalties as hereinbefore provided, or if during the year ending upon the last days of September, 1914 the royalties agreed to be paid under this
82 contract shall not amount to Twenty-five Hundred Dollars (\$2,500.00) or if during the year ending upon the last day of September in subsequent years, during the

life of this contract, the royalties agreed to be paid under this contract shall not amount to Twenty-five Hundred Dollars (\$2,500.00) it being understood that in the event of any deficiency in the amount of royalties, earned as figured on the basis of sales made, the party of the second part may make up any such deficiency so that the total amount paid at the end of each year shall not be less than Twenty-five Hundred Dollars (\$2,500.00), or, if the party of the second part fails or refuses to take proper steps to stop infringements, if any there should be and become known to it, of any of the claims of any of said patents, or if it should not manufacture and sell for use at least five thousand (5000) pieces of any or more of the herein said devices during each and every year of the life of this contract, then the parties of the first part shall have the right to give notice, in writing, to the party of the second part, of its default, specifying in the said notice the respect or particular in which said second party is claimed to be in default, and if said second party shall not, after the receipt of said notice, remedy such default within thirty days, if one there be, the parties of the first part, may, in case they so desire to do, thereupon terminate said license, by notice in writing, to the party of the second part, but such notice or termination shall not relieve the party of the second part from the payment of any and all royalties and guaranteed amounts accrued prior to the receipt of such notice of termination or such amounts as may have accrued prior to the termination of manufacturer of said devices.

83 Eighth: The party of the second part agrees that it will diligently proceed in and about the business of making and offering for sale one or more of the inventions and improvements covered by this license; that it will advertise the same, and use all proper and reasonable efforts to create a demand therefor, and to supply the demand when created.

Finally: It is agreed, that this agreement shall extend to and be binding upon the heirs, assigns, and legal representatives of the parties of the first part, and the successors and assigns of the party of the second part.

In Witness Whereof, the parties of the first part have hereunto set their hands and seals, and the party of the second part has caused its corporate name to be hereto signed by its President, and its corporate seal attested by its Secretary to

Exhibit D.

be hereunto affixed, all as of the day and year first above written.

(Signed) HENRY JOSEPH PODLESAK' (Seal)

(Signed) EMIL PODLESAK (Seal)

(Signed) THE WEBSTER ELECTRIC Co (Seal)

By T. K. WEBSTER.

President.

Attest:

S. A. LOEB

Acting Secretary

Witnesses:

KATE DEMPSEY

ARTHUR L. SCHWARTZ.

(EXHIBIT D.)

License Agreement

(Shop Right)

This Agreement made and entered into this 5th day of February 1914, by and between Emil Podlesak of Racine, Wisconsin, and Henry Joseph Podlesak, of Chicago, Illinois, hereinafter called the parties of the first part, and The Webster Electric Company, a corporation of the State of West Virginia, whose principal office is in the City of Chicago, County of Cook, and State of Illinois, hereinafter called the party of the second part, Witnesseth:

That Whereas the parties of the first part having invented certain and various new and useful improvements in Ignition Devices for Gas Engines, for which they jointly own certain Letters Patent and pending applications for Letters Patent of the United States of America, described as follows:

No. 1,022,642 issued April 9, 1912, Low Tension Sparking Mechanism, (Henry J. Podlesak).

No. 1,055,076 issued March 4, 1913 Current Generators and Ignitors, (Emil Podlesak).

No. 1,056,360, issued March 18, 1913, Inductor Generators for Ignition purposes.

Application, Serial No. 734,143, filed November 29, 1912, Ignitor Devices for Explosive Engines.

Application, Serial No. 668,153, filed December 27, 1911, Magneto Machines.

Application, Serial No. 639,738, filed July 21, 1911 Magneto machines:—

85 And Whereas the party of the second part is desirous of securing a shop right and license to manufacture, use, and sell the inventions and improvements, described and claimed in above said patents, and applications for patents, all or any one of them, the validity of which patents, granted or to be granted, is admitted and to bring and maintain suits against infringers of the patent rights covering the said inventions, within and throughout the United States of America and Territories thereof, and for and during the life of any and all of the patents, and patents that may be granted, on any of the applications described below, or any of them:

Now, Therefore in consideration of One Dollar (\$1.00) by the party of the second part to the parties of the first part, in hand paid, and of the covenants and agreements of the party of the second part, hereinafter expressed and to be kept and performed, the parties of the first part do hereby grant unto the party of the second part a shop right and license to manufacture, use, and sell the inventions or improvements, and each and every one of them, described, set forth and claimed in said patents, numbers 1,022,642, 1,055,076 and 1,056,360, and said applications, serial numbers 734,143; 668,153; and 639,738 and any division or divisions thereof, within and throughout the United States of America and Territories and Possessions thereof, for and during the term of said patents or any of them; and the parties of the first

part agree that they have good right and lawful author-
86 ity to grant said shop right and license, and that they have not heretofore parted with any right, license or privilege inconsistent therewith and that they will not, while this shop license to the party of the second part is in force, give or grant shop licenses to others to make, use, or sell hereinsaid inventions, expressly reserving, however the right to themselves to make, use and sell the hereinsaid inventions.

Second: The parties of the first part agree to and with the party of the second part that they, and each of them will aid and assist each other in the prosecution of said applications and the obtaining of patents thereon and in any interference proceeding relating to their right of priority to said inventions, and in any suit or proceeding brought under any of the said patents or for the infringement of any patents by reason of the manufacture, use or sale, by the party of the second part of the inventions described in said patents or applications; provided, however, that said parties of the first part shall not be called upon to pay out or expend any money

in any suit or proceeding relating to the said inventions, and the parties of the first part hereby appoint the attorney for the party of the second part as their agent and attorney for the purpose of joining them as parties complainant where necessary or desirable, in any suit which the party of the second part may wish to bring on account of the infringement of any of said Letters Patent or any patent which may be granted upon their aforesaid applications, the said

attorney for the party of the second part to have the
87 power to execute as the attorney and agent of the parties of the first part any papers which may be necessary or convenient to the commencement and maintenance of any such suit, it being expressly understood and agreed, however, that the parties of the first part are not to be put to any expense or to be required to expend any moneys, on account of any such infringement suits to which they may be made parties complainant, and it is expressly understood and agreed, further, that the said parties of the first part shall be exempt from liability in damages or court costs resulting from any law suits in which the parties of the first part may thus be joined with the party of the second part, the party of the second part agreeing to assume the payment of any and all damages and court costs that may result from any such suits.

Third: The party of the second part agrees to mark or label each of the devices manufactured under this license agreement in conformity with the provisions of Section 4900 United States Revised Statutes and with the surname of the inventors.

Fourth: The party of the second part agrees to keep a correct account of all devices made and sold under this license, whether sold as a part of and attached to other machines or apparatus or not so attached, containing or embodying the above said improvements or inventions, or any of them, which books of account shall be open to the inspection of the parties of the first part of their attorney or agent at all reasonable times.

Fifth: The party of the second part further agrees to make quarterly reports, in writing, to the parties of the
88 first part, said reports to cover the periods terminating respectively upon the last days of September, December, March and June of each year, each report to be furnished within fifteen days from the termination of the period covered thereby, and showing the total number of devices embodying the improvements shown and claimed in said patents granted or to be granted, or any of them, which it has sold and de-

livered as above stated, during the preceding quarter, which reports shall also show the names of the purchasers or devices embodying the inventions or any of them, set forth and claimed in said patents, Nos. 1,022,642 and 1,055,076, and the number of such devices sold to each purchaser, and shall be verified by the oath or affidavit of the president or some other officer of the Company or corporation comprising the party of the second part, if so required by the parties of the first part.

Sixth: The party of the second part agrees that it will, except as hereinafter provided, use and devices manufactured under this shop license only in connection with, or for repairs to, the device manufactured under license which is covered by the agreement made on February 5th, 1914, by which the parties of the first part give to the party of the second part the exclusive and sole right to manufacture ignition devices covered by patents No. 947,647, of January 25, 1910, Inductor Generators for Ignition Purposes, No. 949,483, issued February 8, 1910. Inductor Generators for Ignition

Purposes, and No. 1,003,649, issued September 19, 1911.
89 Inductor Generators for Ignition purposes, and that whenever the devices covered by this shop right and license are made and sold and delivered not as a part, of, or for use in connection with, the devices manufactured and sold under the aforesaid exclusive license dated February 5th, 1914, then the party of the second part agrees that it will on the day of each and every report pay to the parties of the first part, jointly as a royalty or license fee, five per cent (5%) of all moneys or the equivalent thereof, which they may have received or that may be due them from the sales of or in exchange for the devices covered by this shop right and license sold and delivered during the preceding quarter. It is further expressly understood and agreed that the said devices manufactured embodying above improvements, or any of them, are not to be sold for less than a fair and reasonable price, based upon manufacturing and trade conditions.

Seventh: If the part of the second part shall fail to keep accounts, make reports, and pay royalties, all as hereinbefore provided, then the parties of the first part shall have the right to give notice, in writing, to the party of the second part, of its default, specifying in the said notice the respect or particular in which said second party is claimed to be in default, and if said second party shall not within thirty (30) days after the receipt of said notice, remedy or remove said

default, if one there be, the parties of the first part may, in case they so desire to do, thereupon terminates said license by notice, in writing, to the party of the second part, 90 but such notice or termination shall not relieve the party of the second part from the payment of any and all royalties that may, as hereinbefore provided, have accrued prior to the receipt of such notice of termination or such amounts as may have accrued prior to the termination of manufacture of said devices.

Eighth: The party of the second part, with the approval, in writing, of the parties of the first part, shall have right to grant shop right or license for the manufacture, use and sale of devices embodying the invention described and claimed in said patents No. 1,022,642 and No. 1,055,076, to makers of, or dealers in, gas engines, and gas engine accessories, but such shop rights or licenses so granted by the party of the second part shall be on and with the same terms and limitations as hereinbefore set forth, namely; that the devices made under such shop right license shall be used only in connection with, or for repairs for or to, devices made under the hereinbefore mentioned patents no. 947,647,—948,483,—1,003,649, and 1,056,360, and any patents that may be granted on the hereinbefore mentioned applications Serial Nos. 734,143, 668,153, and 639,738, or any of them, and in no other way. The parties of the first part may approve any such shop right or license, to be granted by the party of the second part, either personally or by attorney, or agent.

Ninth: The party of the second part agrees that it shall not permit or encourage other parties to manufacture, use, or sell devices covered by hereinbefore mentioned patents, or patents that may be granted on hereinsaid applications, or any of them, except as, and on terms and limitations hereinbefore set forth, relative to said shop licenses under patents No. 1,022,642 and No. 1,055,076. It is further agreed and understood that this shop license becomes terminated in the case of event the license given in the said agreement of February 5, 1914, becomes, terminated by manner therein provided for.

Finally, It is agreed that this agreement shall extend to and be binding upon the heirs, assigns, and legal representatives of the parties of the first part, and the successors and assigns of the party of the second part.

In Witness Whereof, the parties of the first part have hereunto set their hands and seals, and the party of the second part has caused its corporate name to be hereto signed

by its President, and its corporate seal attested by its Secretary to be hereunto affixed, as all of the day and year first above written.

HENRY JOSEPH PODLESAK (Seal)
 EMIL PODLESAK (Seal)
 THE WEBSTER ELECTRIC COMPANY
 By T. K. WEBSTER
 President.

Attest.

S. A. LOEB
Acting Secretary.

Witnesses:

KATE DEMPSEY
 ARTHUR L. SCHWARTZ.

Supplemental Agreement

This Agreement made and entered into this 20th day of January, 1915, by and between Emil Podlesak, of Racine, Wisconsin, and Henry Joseph Podlesak of Chicago, Illinois, hereinafter called the parties of the first part, and the Webster Electric Company, a Corporation of the State of West Virginia, have a place of business in the City of Racine, and State of Wisconsin, hereinafter called the party of the second part:

Witnesseth, that

Whereas the parties hereto have entered into a certain exclusive license agreement under the United States Letters-Patents Nos. 947,647, 948,483, and 1,003,649 and a certain shop right license agreement under United States Letters-Patents Nos. 1,022,642, 1,055,076, 1,056,460, 1,101,956, 1,098,052 and 1,098,754, both dated the 5th day of February 1914, and

Whereas under the licenses granted by the parties of the first part to the party of the second part in the said license agreements of February 5th, 1914, the party of the second part has engaged in the manufacture and sale of magnetos and ignition apparatus embodying the inventions described and claimed in the United States Letters-Patents under which licenses have been granted as aforesaid; and

Whereas it has been found expedient to sell ignition equipments combining the magneto generators described and claimed in the United States Letters-Patents Nos. 947,647,

948,483, and 1,003,649, under which royalties are to be paid by the party of the second part to the parties of the first part under said exclusive license agreement of February 5th, 1914, and certain of the features described and claimed in the patents and applications for patents enumerated in the aforesaid shop right license agreement of February 5th, 1914, particularly the ignitor plug, mechanism described and

93 claimed in the United States Letters Patent No. 1,022,642, and the ignitor bracket mechanism described and claimed in the United States Letters-Patent No. 1,055,076; and

Whereas, therefore, it has become difficult to apportion the prices received by the party of the second part for said apparatus between the magneto generators and the equipment sold in combination therewith, and has theretofore become difficult to determine the amount of royalties to be paid to the parties of the first part under the said exclusive license agreement of February 5th, 1914; and

Whereas it is the desire of the parties of the first part and of the party of the second part hereto to simplify the accounting necessary to determine the amount of royalties to be paid by the party of the second part to the parties of the first part under the said exclusive license agreement of February 5th, 1914;

Now, Therefore, in consideration of the premises and of the mutual undertakings of the parties and of One Dollar (\$1.00) in hand paid by each of the parties to the other and receipt whereof is hereby acknowledged, the parties hereto agree as follows:

1. In lieu of certain royalties to be paid as provided for in the said exclusive license agreement under the United States Letters-Patents Nos. 947,847, 948,483, and 1,033,649, the parties of the first part agree to accept and the party of the second part agrees to pay to the parties of the first part; a royalty or license fee of Thirty-seven and one-half cents (37½c) each on all magneto generators known and designated as type Jz, type Jy, type Pz, and Type Py manufactured under said Letters-Patents Nos. 947,647, 948,483, and 1,003,649, or any of them, when sold in, or for use in, combination with said plug and bracket manufactured under said letters-patent Nos. 1,022,642 and 1,055,076, or either of them; a 94 royalty or license fee of twenty Cents (20c) each on all magneto generators known and designated as type K and type L manufactured under said Letters-Patents Nos. 947,647, 948,483, and 1,003,649, or any of them, when sold in, or for use in, combination with said plug and bracket manufactured

under said Letters-Patents Nos. 1,022,642 and 1,055,076 or either of them; and a royalty or license fee of eighteen Cents (18c) each on all magneto generators known and designated as type M manufactured under said Letters-Patent Nos. 947,-647, 948,483, and 1,003,649, or any of them when sold in or for use in combination with said plug and bracket manufactured under said Letters-Patents Nos. 1,022,642, and 1,055,076, or either of them.

2. It is mutually understood and agreed that in the case or event any additional type or types of magneto generators, embodying the inventions described and claimed in said Letters-Patents Nos. 947,647, 948,483, and 1,003,649, or any of them, be in the future developed and put on the market, by the party of the second part, in, or for use in combination with said plug and bracket manufactured under said Letters-Patents Nos. 1,022,642 and 1,055,076 or either of them, the royalty or license fee to be paid on each magneto generator of said such additional type or types shall be determined and fixed by and upon the selling price of the combined structure of such additional type of magneto generators with said plug and bracket in comparison with the current selling prices of the hereinbeforesaid combined structures of the present types of magneto generators—namely, Jz, Jy, Pz, Py, K. L. and M, with said plug and bracket, and that said royalty or license fee to be paid on each magneto generator of the said additional type, or types, shall be same as that above provided for to be paid on any of said existing type of magneto generator the highest selling price of which in combination with said plug and bracket, equals or the least exceeds the highest selling price of said additional type of magneto generator combined with said plug and bracket.

95 3. It is mutually understood and agreed that the amount of royalties or license fees to be paid under said exclusive license agreement and supplemented by this agreement shall be not less than Five Thousand Dollars (\$5000.00) during and for each year, during the life of said exclusive license agreement, each said year ending on the last day of September, as provided in said exclusive license agreement.

4. It is mutually understood and agreed that this supplemental agreement shall be regarded and construed merely as fixing arbitrary the rate of royalty or license fee to be paid on each said device manufactured under said exclusive license agreement and sold as hereinbefore set forth; and as increasing the minimum annual amount of royalties or license fees to be paid under said exclusive license agreement; and

Exhibit F.

except in these two particulars this supplemental agreement is not to and does not modify or alter or change in any respect the terms and conditions of said exclusive license agreement and of said shop right license agreement, both dated February 5th, 1914; and it is further understood and agreed that this supplemental agreement becomes terminated in the case or event the said exclusive license agreement becomes terminated by manner therein provided for.

Finally, it is agreed that this supplemental agreement shall extend to and be binding upon the heirs, assigns, and legal representatives of the parties of the first part, and successors and assigns of the party of the second part

In Witness Whereof, the parties of the first part have hereunto set their hands and seal, and the party of the second part has caused its corporate name to be hereunto signed by its President, and its corporate seal attested by its Secretary to be hereunto affixed, all as of the day and year first above written.

EMIL PODLESAK (Seal)

HENRY JOSEPH PODLESAK (Seal)

THE WEBSTER ELECTRIC COMPANY

By S. A. LOEB
Vice-President.

(Corporate Seal)

Attest:

EMIL PODLESAK
Secretary.

“EXHIBIT F.”

File No. 2425.

Memorandum of Agreement made and entered into this 4th day of September, A. D. 1915, by and between Emil Podlesak of Racine, Wisconsin, and Henry Joseph Podlesak of Chicago, Illinois, parties of the first part, and the Splitdorf Electric Company, a corporation organized and existing under the laws of the State of New Jersey, having its principal office and place of business located in the City of Newark, County of Essex, in said State, and the Sumter Electrical Company, a corporation organized and existing under the laws of the State of South Carolina, having its principal office and place of business in the City of Sumter, County of Sumter, in said State, said corporations jointly parties of the second part;

Whereas the parties of the first part are the present joint

owners of certain inventions relating to inductor electric generators for internal combustion motor ignition, and of certain letters patent granted therefor as follows:

No. 949,647, issued January 25, 1910; No. 948,483, issued February 8, 1910; and 1,003,649, issued September 19, 1911, all for Inductor Generators for Ignition purposes, and of certain other inventions relating to ignition devices for gas engines, for which applications have been filed and letters patent have been granted as follows: No. 1,022,642, issued April 9, 1912, Low Tension Sparkling Mechanism, No. 1,055,076, issued March 4, 1913, reissued February 9, 1915, as No. 13,878, for Current Generators and Igniters; No. 1,056,360, issued March 18, 1913, for Inductor Generators for Ignition Purposes, applications serial No. 734,143 filed November 29, 1912, for Igniter Devices for Explosive Engines, patented June 30, 1914, as No. 1,101,956; application Serial No. 639,738, filed July 31, 1911, Magneto Machine, patented May 26, 1914, as No. 1,098,052, applications serial No.

668,153, filed December 27, 1911, as a division of original 97 application No. 639,738, patented June 2, 1914, as No. 1,098,754; and application serial No. 668,153, filed December 27, 1911, Magneto Machines, patented as No. 1,098,754; and

Whereas said parties of the first part have heretofore granted licenses under said patents to the Webster Electric Company of Racine, Wisconsin, as evidenced by three certain written instruments dated respectively the 5th day of February 1914, the 5th day of February 1914, and the 20th day of January 1915, of which true copies are hereto annexed and marked respectively Exhibits A, B, and C; and

Whereas the parties of the second part having been nominated by F. C. Manning under his opinion dated August 20, 1915, and being his assignees thereof, are desirous of acquiring the entire interest in the aforesaid inventions, letters patent and applications, together with all rights to manufacture, use and sell said inventions subject only to the licenses heretofore granted to the Webster Electric Company, also the entire interest of the parties of the first part in the aforesaid agreements with the said Webster Electric Company and in the business of manufacturing and selling magneto ignition apparatus for internal combustion engines, together with the good will appertaining to the said business of the parties, of the first part, in part represented by the association of their names or either of them with said business or with apparatus manufactured or to be manufactured and

sold under the aforesaid letters patent and applications on said agreements; also all reissues granted or to be granted or said letters patent and patents granted on said applications, as well as any improvements on said inventions, the applications and patents therefor.

98 Now therefore be it known that for and in consideration of the sum of Twenty-five Thousand Dollars (\$25,000.00) to them in hand paid, the receipt of which is hereby acknowledged, and of the further considerations hereinafter set forth, the parties of the first part have sold, assigned, transferred, set over and conveyed, and by these presents do hereby sell, assign, transfer, set over and convey unto the parties of the second part jointly the entire right, title and interest in, to and under each and every the hereinbefore mentioned inventions and improvement, letters patent, and applications for letters patent, with all divisions reissues and extensions thereof, including the right to sue and recover to their own use for infringement of the same, whether committed before or after the date hereof, this assignment being subject only to the licenses heretofore granted to the Webster Electric Company, also the entire right, title and interest in, to and under or arising out of the aforesaid license agreements with the Webster Electric Company, and the Royalties and other profits flowing therefrom after the date hereof, as well as the entire interest and good will of the parties of the first part in the business of manufacturing and selling magneto ignition apparatus for internal combustion engines and any other apparatus described or claimed in said letters patent and applications and included in said license agreements; the same to be held and enjoyed by the said parties of the second part, or the survivor of them, their or its successors or assigns, as fully, freely and entirely as they might have been held and enjoyed by the parties of the first part had not this assignment and sale thereof been made.

99 It is understood and agreed that the preparation and the prosecution of all applications for patents on inventions hereby conveyed or agreed to be conveyed, including both pending and new applications, original, divisional, reissues, and extension, shall be by the attorney or attorneys for the parties of the second part, on their designation, and the parties of the first part hereby appoint said attorneys and their attorneys for such purpose, and agree that they will at all times keep the parties of the second part or their said attorneys fully informed as to inventions they may make which might fall within the terms of this agreement, and

that they will at all times aid and assist in the preparation and prosecution of said applications, and in any proceedings ancillary thereto, all, however, without expense to themselves for costs or attorneys's fees, said expense to be borne entirely by the parties of the second part. The parties of the first part also agree that upon demand of the parties of the second part or said designated attorneys, they will execute assignments satisfactory to said attorneys of all said inventions and improvements not herein specifically designated but included within the scope hereof.

In further consideration of the said transfer and the faithful performance by the parties of the first part of the covenants herein contained, the parties of the second part for themselves, their survivor, successors or assigns, agree to pay an additional sum of Forty Thousand Dollars (\$40,000.00) in four equal installments of Ten Thousand Dollars (\$10,000.00) each, payable one installment on the first day of October of each of the years, 1916, 1917, 1918 and 1919.

In further consideration of the payment to them made, which includes a special sum of Five Thousand Dollars 100 (\$5,000.00) for this purpose, which said sum is deemed by the parties hereto to be adequate in the premises, and as ancillary to the foregoing assignment and sale, and in order to protect the parties of the second part, their survivor, successors and assigns in the full and complete realization and enjoyment of the rights, title and interest thus conveyed, the parties of the first part do hereby jointly and severally covenant and agree that they and each of them shall not engage in the manufacture or sale of magneto ignition apparatus for internal combustion engines for and during the period of five years from and after the date of these presents, throughout the territory covered and included within the monopoly granted by the aforesaid letters patent, it being the intention of the parties hereto that the field of business of the parties of the second part includes the whole of and is co-extensive with said territory.

It is understood and agreed that nothing in this covenant shall operate to prevent the parties of the first part from engaging in business involving either the use of a magneto generator for other purposes than internal combustion engine ignition, or involving the accomplishment of internal combustion engine ignition by other means than magneto generator or dynamo; provided said business does not involve any infringement upon any claims of the patents hereby as-

signed or agreed to be assigned to the parties of the second part, the validity of which is expressly admitted and warranted by the parties of the first part. It is further understood and agreed that in the event of any breach of this covenant not to compete by the parties of the first part or either of them, they shall thereupon become jointly and severally liable to the parties of the second part in the sum of Five

Thousand Dollars (\$5,000.00) as liquidated damages, and 101 in addition thereto for all actual damages in excess thereof, sustained by the said parties of the second part, their survivor, successors or assigns, by reason of said breach, such damage to be assessed and determined by a court of proper jurisdiction and pending such determination all sums remaining in the hands of the parties of the second part and which would otherwise be due and payable under this agreement to the parties of the first part to be retained by the parties of the second part as security for the payment of the aforesaid damages.

The parties of the first part hereby warrant that they have the right to manufacture, use and sell the inventions described and claimed in letters patent No. 1,022,642, April 9, 1912, No. 1,055,076, March 4, 1913, reissued February 9, 1915 as No. 13,878 and 1,056,360, March 18, 1913, also applications serial No. 734,143, filed November 29, 1912, serial No. 668,153, filed December 27, 1911, and serial No. 639,738, filed July 21, 1911; that they are the owners of the said letters patent, and also of all the other letters patent and inventions mentioned in the aforesaid agreements with the Webster Electric Company, Exhibits A, B, and C; that they have the right to make this assignment, including all of said patents and agreements; that they have not previously made any assignment or granted any license, shop right or other rights of any kind or character, of, to, in or under the aforesaid patents, saving and excepting only the rights granted under agreements Exhibits A and B to the Webster Electric Company, and that when they made and entered into said agreements with the said Webster Electric Company, it was understood and agreed on the part of the Webster Electric Company that the parties of the first part hereto reserved and retained to and in themselves all the rights, title and interest herein and hereby warranted and that the same were assignable by the parties of the first part at their own will and pleasure.

102 It is understood and agreed that this contract is made under and to be construed according to the laws of the

State of New Jersey, and is fully executed and delivered in the city of Newark, in said State.

In witness whereof the parties of the first part have hereunto severally subscribed their names and affixed their seals in triplicate this 4th day of September A. D. 1915; and the parties of the second part have severally caused their names to be signed and their corporate seals to be affixed hereto at the times and places indicated below, by their respective officers to that end duly empowered.

(Signed) HENRY J. PODLESAK (Seal)

(Signed) EMIL PODLESAK (Seal)

SPLITDORF ELECTRIC COMPANY

By.....
President.

Place.....

Date

Attest:

.....
Secretary.

SUMTER ELECTRICAL COMPANY

By.....
President.

Place.....

Date

Attest:

.....
Secretary.

City of Washington }
District of Columbia } ss:

On this 4th day of September, 1915, before me personally appeared Emil Podlesak and Henry Joseph Podlesak, to me known to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

.....
Notary Public.

103 State of }
 County of } ss:

I, _____ a Notary Public in and for said county in said State, hereby certify that whose name as President of the Splidrof Electric Company, a corporation, is signed to the foregoing conveyance, and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation. Given under my hand this _____ day of September 1915.

Notary Public.

State of }
 County of } ss:

I, _____ a Notary Public in and for said county in said State, hereby certify that Charles Thomas Mason, whose name as President of the Sumter Electrical Company, a corporation, is signed to the foregoing conveyance, and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation. Given under my hand this _____ day of September, 1915.

Notary Public.

104

"EXHIBIT G."

April 8, 1915.

Mr. H. J. Podlesak,
 1636 Millard Avenue,
 Chicago, Illinois.

Dear Sir:—

In going over the matter of having the royalties for the last quarter under your contract with the company figured, we find that we had, under date of April 29th, 1914, in a letter to our president, Mr. T. K. Webster, a statement from our attorney that we should not pay, and you were not en-

titled to, royalty on spare or repair parts, though for some reason according to our former statements, this practice has not been followed, and Emil does not seem to know much about it.

Also we notice that on the "G" and "F" machines which we have been taking back from the Harvester Company and on which we have not been having some exchange arrangement for new machines, that we have deducted the amount from the total to figure royalties on, based on the price which we allow the Harvester Company on the machines. Unless there was some mutual arrangement entered into in regard to this, and that fact we are not unable to learn from your brother or anybody else here, it does not seem to the writer that this is a just deduction.

On the "G" and "F" type machines which we take back and make replacements of "J" and "K" machines, we think it would be fair to figure these both ways. For an example:— We are making the Harvester branches a special proposition where their customers are complaining of "G" and "F" machines, in which we furnish them the "K" and "JY" machines in exchange at a reduced price over what we sell them for at the works regularly, taking the old "G" and "F" machines as the balance of the payment. In these cases the full royalty would be allowed you on the "JY" and "K" and the royalty formerly paid on the "G" and "F" figured back against this. In all these subjects, which we have had up with Emil, the writer understands he agrees with his views in the matter.

105 We are calling this to your attention as we do not know when we will have an opportunity to take this up with our board of directors, the annual meeting having again been postponed. We would very much appreciate having an expression from you in regard to this.

Thanking you in advance for your early attention, and awaiting your further esteemed favors, we are

Yours very truly,

THE WEBSTER ELECTRIC CO.

By WALTER BROWN,

Gen. Mgr.

106

Chicago, April 24, 1915.

Webster Electric Company,
Racine, Wisconsin.

Mr. Walter Brown, Gen. Manager.

Dear Sir:

Referring to the matter of returned magnetos, spare parts, etc., as per your letter of the 8th instant, I have not up to this date had the opportunity to take this matter up with Mr. Lynn A. Williams, your attorney. You will recall my mentioning, during our talk in your office some few days ago, that I would try to first go over the matter with him. But it seems that when I call at his office he is either out or long busy; and lately I have been and still am kept quite busy and away.

On that matter of repairs, that is repairs proper, repairs that you may make on any item of Webster Ignition apparatus at your factory, branch house, or service station, by replacing worn parts or broken parts, such repairs are not subject to royalty fees, under the law. When however it comes to the matter of spare parts, stock of which you may sell to engine makers, jobbers, or anybody, the thing becomes a different question, as these spare parts are not repairs, necessarily, but just parts, merchandise. For example, some of your customers may order a stock of the Jz gage and starting levers, along with a few other parts; the levers may find their way, land, on Witchcraft magnetos. We could not very well collect royalties from the users of these particular repair parts, because they were lawfully made under a license to make and sell. And, according to Mr. William's letter you refer to, you should not pay any royalty on such spare parts to us, as we are not entitled to it. And likewise would it be with the plug frames or bodies, either assembled or not so, and with other items.

Take the igniter plug frame or casting, the Ingeco, or the Alamo, people can obtain a lot of these that were made by you, and make use of them for mounting the Hercules magneto on them. Of course, under the terms of our contract, such plugs, etc., should be used only in connection with the Webster magneto. But you make these under proper license and sell them as spare parts to either of the above firms, or to I. H. C., and after I. H. Co. have paid you for these they may use them as they see fit or please—to mount the Accurate magneto thereon, for example,—unless you call their

attention to the restrictions as to use in selling to them, if that would help any.

I did not carefully read over your attorney's letter when I was in your office some days ago for the reason that I figured on seeing him as to the matter, and not having been able to have a discussion with him, I cannot make any remarks on his interpretations, etc. However, it seems to me that the Sixth clause of our shop right license agreement makes the matter quite clear as to when the devices, repairs, are royalty free and when not so.

107 page 2—W. E. Co.—April 24/15—Repairs, spare parts, etc.

The repairs proper will, my guess is, add but very little to your business in dollars and cents in the future; at least I do not look for much yearing out of parts, nor breakage either. The spare parts business might amount to considerable.

Heretofore I have not called your attention to the provisions of the Fifth clause of the shop right license for the reason that I considered that any of the extra parts, over and above those shipped in connection with the magnetos, were accounted for in the repairs part of the reports.

Now on that matter of returned magnetos, on those you have paid a royalty of five percent of the selling price. When such magneto is returned outright, you are entitled to deduct the royalty you paid on it. When you take back one of these in exchange for another one, magneto, allowing say two dollars for the old magneto in the exchange, then you are entitled to deduct five per cent of the two dollars, or whatever sum you allow or agree to allow in the exchange. That is, you deduct the royalty on the amount you pay for the old or returned magneto.

Yours truly,

HENRY J. PODLESAK,

Atty. for Podlesak et al.

108

Chicago, July 17, 1915.

Webster Electric Company,
Racine, Wis.

Gentlemen:—

I beg to acknowledge receipt of part of the quarterly report of sales of ignition devices by you during the second quarter of 1915, and also of your check for \$1706.37, this sum to apply on account of the royalty fees for said quarter.

Further beg to acknowledge the receipt of a page of old history, which I will look up as soon as my time permits doing so.

I again beg to call your attention to the fifth clause of the shop right agreement, between yourselves and the Podlesaks, with reference to the quarterly reports; also to my letter to you dated April 24, 1915.

I note that you again, in the royalty report, report the 'returns' the outright returned magnetos, with the 'exchanges of type G', and deduct the total fee on these latter as you do on the 'returns'. My understanding is that in this exchange proposition, you allow about one dollar and fifty cents for each G machine returned in exchange for a J or a K machine; therefore, you are entitled to only the pro rata deduction on this allowance that you make for type G machine, and not to a deduction of the total fee per piece.

Awaiting the complete quarterly report, I am

Yours,

HENRY J. PODLESAK,

Atty. for Podlesak et al.

1636 Miller Ave.,
Chicago, Ill.
HJP/S

109

July 27, 1915.

Mr. Henry J. Podlesak,
1636 Millard Avenue,
Chicago, Illinois.

Dear Sir:—

Your valued favor of July 17th to hand and should have had our earlier attention but for the absnce of the writer from the city.

Replying, beg to advise that in view of the fact that the fourth clause of the Shop Right Agreement to which you refer, gives you at any time the right to make examination of our books and verification of our reports, we did not consider that in your communication of April 24th, and in view of the fact that it has never been your practice with this company to require it, also that the real difference in your getting it would simply mean additional work for our office, that you were really meaning and intending to cause that inconvenience.

However, in order that there may be no question on this score, we are having the report made up with the oath of one

of our officers attached, for while we do not understand you have requested the latter, we anticipate this in order to avoid possible further controversy.

As to the returns on "G" and "F" machines and the manner in which we have made up this report, this is in conformity with our letter of April 8th to which your brother and partner, Emil Podlesak, has already agreed as stated in our letter, and to which you agreed in our office a few days later except that all of us jointly, in considering the matter, agreed that the difference in your favor would be so slight, and would save unnecessary work, that we would effect in each case the "G" and "F" against the "K's" and "J's" exchanged and not charge back anything on cash allowance only. It is true that after you did fully agree to this, that you wrote us again under date of April 24th, in which you wanted to agree to something else apparently more to your advantage, but in our talk which we had with Emil Podlesak later, we understood that the agreement as arrived at verbally and to which we were all a party would be satisfactory in making the settlement.

Now if we understand that it is the desire of both of you to again change this agreement and demand that we should make returns, deducting royalty only on the allowance that we make for "G's" and "F's" when returned outright, or

in case of exchange on the difference between the regular 110 selling price of "K" and "J" in the quantities exchanged

and the price exchanged for, then we will immediately, upon receipt of your advice to the effect that this is the proposition you are ready and willing to agree to and now abide by, revise that part of our quarterly report to conform to your present ideas and enclose a check for whatever difference may be due you, under this new arrangement.

Awaiting your early advice with regard to this, we are

Yours very truly,

THE WEBSTER ELECTRIC CO.

By WALTER BROWN,

Gen. Mgr.

WB: DP

111

Chicago, Aug. 7, 1915.

Webster Electric Company,

Racine, Wis.

Gentlemen:—

Your valued favor of July 27th, by your Mr. Walter Brown,

to hand and would have had earlier attention but for my absence from the city.

Replying, beg to acknowledge receipt of the 2nd quarterly report under the shop right license.

Replying further, beg to say that the only agreements between the Webster Electric Company and the Podlesaks I knew of are: the sole and exclusive license and the shop right license agreements both dated and executed on February 5th, 1914, and a supplemental agreement, to the above, dated and executed on January 20th, 1915. I am not aware of any other agreements such as mentioned in your letter to exist. My brother, and partner in the herein matter, Mr. Emil Podlesak disclaims having made, asserts that he has not made, any agreements, or changes to agreements, or any other arrangements, in respect to the herein matter, other than those above mentioned; and I am sure I made no agreements, etc., other than the above mentioned.

Coming again to your letter of April 8th, 1915, also by your Mr. Brown, mentioned in your favor of the 27th ultimo, will say that about a week or ten days after receiving this letter, —which I did not clearly understand—I happened to be in Racine and called at your office, where Mr. Brown explained to me this letter and the matters referred to therein. It was upon the explanations and understanding derived from this interview that I wrote you on April 24th, 1915, and in this letter I endeavored to explain the matters as they stand. And I think this letter does quite clearly explain the matter under discussion.

Referring now to the fifth paragraph of your letter of July 27th, 1915, will say that we, both Emil and I, are not aware of the fact that we desired any change of or in any agreements between the Webster Electric Company and ourselves. Nor do we desire, intend, or mean to cause the Webster Electric Company unnecessary or any inconvenience; on the other hand, it is and has been our desire to assist in any way possible for us, to co-operate with the Webster Electric Company. All we desire, ask for, is that which is due us under the before mentioned agreements.

We trust you will amend at your earliest convenience those of your reports that have not been formal.

Thanking you in advance, I am

Yours very truly,

HENRY J. PODLESAK,
Attorney for Podlesak et al

112

September 7, 1915.

Mr. Henry J. Podlesak,
Atty. for Podlesak et al.,
Chicago, Illinois.

Dear Sir:

Your valued favor of August 7th came to hand and would have had our earlier attention but that we have not only been extremely busy, but a number of our office force have been taking their yearly vacation within this interval.

In accordance with your request, we have revised our first and second quarterly reports for 1915 covering the difference on replacements to conform with the manner which you have insisted on, and as you will notice by the sheets enclosed herewith, this makes a balance which we overpaid you on the first quarter of \$15.08, and on the second quarter of \$3.78, or a total of \$18.86 as per itemized accounts herewith.

Will you kindly advise us whether you prefer to render a check for this or wish that we should take it off of the next quarterly settlement?

Awaiting your further esteemed favors, we are

Yours very truly,

THE WEBSTER ELECTRIC CO.

By WALTER BROWN,

Gen. Mgr.

WB: DP

Enc. 2.

113

Chicago, Sept. 9, 1915.

The Webster Electric Company,
Racine, Wisconsin.

Gentlemen:

Your valued favor, by your Mr. Walter Brown, of 7th instant, a response to my letter of August 7th, is received and noted. I beg to thank you for the revisions, to the first and second quarterly, 1915, reports, enclosed with your letter.

In noting the second paragraph of your letter it would seem that you misunderstand, for some reason, my request; this request embodies nothing but a reasonable, friendly, accordance in our agreements, the terms thereof.

Returning to the revisions, inasmuch as there appear to be some discrepancies in these revisions to the reports when compared with like details or items of the reports themselves, I feel constrained to request corrections, so that our accounts may become properly adjusted.

As to these discrepancies, please observe that in the first

quarterly report, 1915, you reported a total of 74 devices under the item of "Returns and exchanges", whereas in the revision for the same quarter you report a total of 36 devices replaced or exchanged, and further report a total of "268 'G' & F'F machines returned from I. H. Co. @ 1.50 ea—", making a grand total of 304 devices reported in the revision against a grand total of 74 devices reported in the quarterly report.

Which of the above-mentioned two statements is correct? Were the 268 G & F machines replaced by other types of machines?

Similarly, in the second quarterly 1915 report you reported a total of 179 devices under the item of "Returns and exchanges" And In The Revision For The Same Quarter You Report A Total 57 devices replaced or exchanged, and further a total 134 G & F machines returned 'from' I. H. Co. @ \$1.50 each etc. Which if these is correct?

Please render correct amended statements of the reports, verifying same by oath of the president or vice-president of your company, to Podlesak et al at your very earliest convenience.

The matter of financial adjustment of our accounts, as mentioned in the third paragraph of your letter, will be promptly attended to after the receipt of the proper, formal statement of the accounts.

Thanking you for the past favors, we are

Yours very truly,

PODLESAK & PODLESAK

By HENRY J. PODLESAK

Attorney.

114

September 14, 1915

Podlesak & Podlesak,

Chicago, Illinois.

Attention of Mr. Henry J. Podlesak, Attorney

Gentlemen:

Replying to your esteemed favor of September 9th, beg to advise that in making the revised reports, we only took into consideration under "Returns and Exchanges" those machines which were returned by the Harvester Co., and for which we made replacements under our exchange proposition. The difference between the 74 and 36 devices thus reported in the original report for that quarter and in the amended report covers machines returned by travelers, from

initial equipments, etc., on which royalties had already been paid and which went back into stock when they were returned.

The items of "G" and "F" as returned from the Harvester on which we allowed them \$1.50 each is in accordance with both your letters and verbal statements as to your conception of the contract, but which we were construing to your more favorable advantage than your own construction of it, and this accounts for the difference as due us, for which we have rendered you reports covering both quarters.

If you wish to have the affidavit of an officer of the company attached to same and will kindly forward both of the amended reports which we sent you, the affidavit of an officer of the company will be furnished in accordance with contract, but not necessarily the affidavit of the President or Vice-President as required in your letter under reference.

Thanking you for your early attentions, and awaiting your further valued favors, we are

Yours very truly,

THE WEBSTER ELECTRIC CO.

By WALTER BROWN,

Gen. Mgr.

WB:DP

115

Chicago, Sept. 25, 1915.

The Webster Electric Company,
Racine, Wisconsin.

Gentlemen:

In response to your favor of Sept. 14th, 1915, by your Mr. Brown.

This letter does not, to my regret, clear up the discrepancies existing between the regular reports and the revisions. In fact, to us the matter becomes somewhat more entangled by this letter. We cannot understand why the devices returned by the travelers should not be reported or are not reported in the revisions, when they had been reported in the reports due at regular periods, especially so when the number of devices returned by travelers is greater than the number returned in regular course of business.

Inasmuch as your letter does not clear up the discrepancies in your reports and revisions, and that the revisions would not, even if verified by oath, correct the reports, I am not returning, as you request me to do, these revisions for verification.

We also note reference to the matter of constructions, in the second paragraph of your letter, of the license agree-

ments. Because the spirit of these agreements is so clearly and unmistakably expressed in the letter of these agreements, we are at a loss to understand your said reference.

We are, of course, confined to the terms and covenants, in the agreements, regardless of any constructions which we might prefer to think as more favorable to us, there being no occasion for opinion as to construction, the letter of the contracts being clear and explicit.

It does appear, however, that on the part of your company there may have been some doubt as to the letter of these contracts. The discrepancies that have crept in to the reports would indicate this altho these discrepancies may be due to clerical errors or misunderstanding on part of the bookkeepers, or to both, partly to each.

That your reports were correct I never doubted, I considered them correct, and for that reason, never thought of troubling you by the right provided in the contracts to examine the books. Your letter of April 8, 1915 was the first indication to me that your reports may have been incorrect, irregular; your reports for the second quarter, 1915, gave further indication of this; your revisions to the first and second quarterly reports of 1915, seem to show clearly that there have been and are errors in your reports, and I am therefore compelled to examine the reports.

Looking over your reports and examining the details or items, and beginning with your revisions, rendered Sept. 11 7, 1915, and the first and second quarter, 1915, reports, to which these revisions refer, I find that in the first quarterly report you report, and charge back to me, deduct, at rate of 37-1/2c for 63 J machines, as returns and exchanges, and in the revisions applying to this report you report only 31 J machines on same item—a difference of 32 machines, on which you deducted from the first quarterly payments at 37-1/2c more than you now report in the revision. In this same report you deducted for 11 K machines 20c making a total of \$13.10 excess deduction taken from the royalties due us for that period, and this amount \$13.10 is now due us from the first quarter, 1915, on this item. On the balance of the K and J machines or 5 K machines and 31 J machines, on which you made exchanges, as is shown in your revision, you are entitled to deduct from the per piece royalty fee, 5% of the difference between the regular price, at which you regularly furnish the machines and the price at which you fur-

nish them in the exchange deal; in other words, you are entitled to deduct 5% of the amount which you allow, give, for the machine given back to you in exchange for a new one; you are not entitled to deduct 5% of the difference between the original price of the machine now given you in exchange and the reduced exchange price of a new machine, which appears to be the way you have figured these deductions in the revisions.

To illustrate, if a machine that you sold for say \$10.50 is returned in exchange for another one which you regularly sell for \$7.50 but in the exchange you furnish it at \$6.50, you are not entitled to deduct 5% on the difference between \$10.50 and \$6.50, but only on the difference between \$7.50 and \$6.50, which is the price you allow for the old machine.

Further, I notice an item, at the foot of the revision for first quarter, 1915, report, of "268 'G and F' machines returned from I. H. Co. at 1.50 each (Allowance 5% or 7-1/2c each) 20.10" and this item I do not find in the regular report for this period; furthermore you are deducting us this 'Allowance' of \$20.10; and I am unable to determine why you charge us with this deduction. From the face of the reports and the revision, it would appear that these 268 G and F machines are some old ones that you have bought outright from the I. H. Co. If such be the case, and it seem to be, then you are not entitled to a deduction, such deduction would not be just, nor in accordance with the contracts as you yourself stated in the second paragraph of your letter of April 8, 1915.

To summarize on the first quarter, 1915, report and revision thereto; you have deducted, from the royalty fees on 32 J machines too many at 37-1/2c, and 11 K machines too many at 20c, both these items in the regular report. In the revision, you now elect to deduct on the difference between the original selling price of machines and the exchange selling price of the new exchange machines in 31 of J machines exchanges, and 5 of K machine exchanges, whereas you are entitled to a deduction on difference between the selling price and the exchanging price of the new machines.

Coming now to the report for second quarter, 1915, and to the later revision, thereto, I find that in the regular report 47 J and P machines are reported as returns and exchanges, and only 45 J machines so reported in the revision; that 117 132 K and L machines are reported returned and exchanged in the regular report and only 12 so reported in

the revision—a difference of 120 machines at 20c or \$24.00 excess deduction from the royalty due me in addition to the 75c excess deduction on the J exchanges. These together with the \$13.20 excess deduction in the first quarter before mentioned, makes \$33.95 due us in royalties, from this item, for the first and second periods of 1915.

Further in respect to the period 1915, report and revision, I find, at the foot of the revision part, item of "134 G and F machines returned from I. H. Co. at \$1.50 each (allowance 5%) or 7½c each 10.05", and in your figures you are deducting this amount from the royalty fees. But such deduction is not just, and is unallowable. Attached to the regular report, I find a page of old history, for the years 1912, 1913, and 1914, and I find that you have deducted from our royalty fees a sum of \$488.98 on account of item, repairs, listed in said page of history. I mentioned this page of history in my acknowledgment of receipt of report under date of July 17, 1915, and must here repeat that I will look this up as soon as I possibly can, and I do not at this time grant that this deduction is proper and just; and please refer to my letter of April 24, 1915, the first five paragraphs of this letter, bearing on this matter.

In my endeavor to get some light on this said old history from the records to me now available, viz: the royalty reports for the years 1912, 1913, and 1914, I find that the amount deducted for machines returned averages around \$8.00 per machine during year 1912, and during the first and second periods of 1913. During the third period of 1913, I find, in the quarterly reports that during July, 1913, 102 machines were returned, the amount deducted for these is given as \$160.50, or about \$1.57 apiece; during August, 1913, 3 machines returned, amount deducted \$29.00 or about \$9.66 a piece; during September, 1913, 49 machines returned, amount deducted \$89.00 or about \$1.40 a piece. Certainly there must be an error in your report, as the difference between the deduction of \$9.66 per machine during one month and a deduction of only \$1.40 per same machine during another month is too great. Which deduction is correct? Perhaps the deductions at the rate of \$1.50 average, per piece are the kind you mention in the second paragraph of your letter of April 8, 1915 and if so, these deductions are not proper, not just, and should not be made or rather, should not have been made.

Similarly in the fourth quarter, 1913, report, I find that in November, 59 machines were returned, \$105.45 deducted there-

for, or about \$1.78 apiece; during December 13 machines returned, \$112.00 deducted, or about \$8.61 a piece.

During 1914, in January 3 machines returned, \$25.00 deducted or about \$8.33 a piece; in February 46 machines returned \$83.00 deducted or about \$1.80 apiece; in March 141 machines returned \$251.50 deducted or about \$1.80 a piece; in April 86 machines returned \$152.35 deducted, about \$1.79 apiece; in May 69 machines returned \$162.00 deducted, about \$2.34 apiece; in July 67 machines returned \$136.00 deducted, about \$2.03 apiece; in July 1 machine returned 118 \$7.25 deducted; in August, 45 machines, \$200.50 deducted, about \$4.45 apiece; in September 2 machines returned, \$16.00 deducted \$8.00 apiece; in October 44 machines returned \$85.00 deducted about \$1.94 per piece; in November 232 machines returned \$360.36 deducted about \$1.55 apiece; in December 34 machines returned \$51.00 deducted about \$1.50 apiece. The rates of price per piece on the above mentioned returned machines do not, it would seem, appear to be correct, to me they do, not appear to be correct. Will you please inform me just how these rates were arrived at, and whether they are correct or not correct?

I further find in the third quarterly report for 1914, a net total of 474 K and L machines sold for this quarter, and a net total of 52 K and L magnetos sold and as omitted from the second quarterly report, 1914, but the selling price is not given so that the 5% royalty fee could be ascertained. Similarly in the fourth quarter, 1914, report, a net total of 1677 K and L magnetos are reported sold selling price not given, same way as it is given for the other types of magnetos reported sold. Comparing payments of royalty fees you made for these two periods, it would appear that you figured the royalty fees on these K and L magnetos at about 20c apiece; the net selling price should have been given and the royalties figured at 5% on this selling price. Please revise your abovesaid reports so as to remove the errors pointed out above.

Notice is hereby given you of your default in the matter of keeping correct accounts, making correct reports and returns thereon in respect to the royalties, all as provided for in the agreement of February 5, 1914, particularly in the seventh clause thereof, as hereinbefore pointed out. By the terms of said contract you have 30 days within which to remove these defaults, however I do trust that you will be so kind that you will correct the error by the time the next report is due.

In conclusion, I very much regret that these errors have crept into the accounts; and were it not for the absolute necessity of having our transactions and accounts in proper and regular form and condition, I would not have gone to the extreme pain, and expense of time, in the endeavor to bring our transactions and accounts into proper condition.

Thanking you for all courtesies extended during the past time, and trusting that once the accounts become righted, they stay so, I am

Yours,

HENRY J. PODLESAK
Atty. for Podlesak et al.

119 AMENDMENT TO BILL OF COMPLAINT.

(Filed November 8, 1915)

Now comes the plaintiff, and by leave granted in open court on November 11, 1915, amends its Bill of Complaint as follows:

1. By cancelling the preamble and substituting therefor the following preamble:

"Webster Electric Company, a corporation organized, chartered and existing under and by virtue of the laws of the State of West Virginia, having its principal place of business at Racine, in the County of Racine, and State of Wisconsin, a citizen of the State of West Virginia, brings this its bill of Complaint against Henry Joseph Podlesak (hereinafter sometimes called Henry J. Podlesak), residing at Chicago, Illinois, a citizen of Illinois and a resident of the Eastern Division of the Northern District of Illinois, Tesla Emil Podlesak (hereinafter sometimes called Emil Podlesak or T. Emil Podlesak or Tesla E. Podlesak), residing at Racine, Wisconsin, a citizen of Wisconsin, having a regular and established place of business at Chicago, Illinois, within the Eastern Division of the Northern District of Illinois, within which division and district he has committed acts of infringement of plaintiff's patents hereinafter complained of, Sumter Electrical Company, a corporation organized, chartered and existing under and by virtue of the laws of the State of South Carolina, and Splitdorf Electrical Company, a corporation organized, chartered and existing under and by virtue of the laws of the State of New Jersey, both of which said corporations have regularly established places for doing business

and duly appointed authorized agents or officers located in the City of Chicago, State of Illinois, in this Division and District, within which District and Division both of said corporations have committed acts of infringements of plaintiff's patents hereinafter complained of, and complains and shows:"

2. On page 27 in paragraph XIX, in line 17, by cancelling the words and figures "September 4, 1915", and substituting therefore the words the filing of this Bill of Complaint,"; in line 19 of the same paragraph, by cancelling the words "and of said Podlesaks"; in line 20 of said paragraph by changing the word "their" to its

3. In paragraph XXIII, on page 43, in line 15 on said page, by inserting after the words "Emil Podlesak" and before the words "have aided" the words within the Eastern Division of the Northern District of Illinois and elsewhere."

WEBSTER ELECTRIC COMPANY
By WALTER BROWN
Vice-President.

121 State of Illinois }
County of Cook } ss.

WALTER BROWN, being first duly sworn, says that he is the Vice-President of Webster Electric Company, the plaintiff in the above entitled cause, and that he has read the foregoing amendment to the Bill of Complaint in said cause, and that the matters stated are true of his own knowledge.

WALTER BROWN

Subscribed and sworn to before me this 11th day of November A. D. 1915.

ALBERT G. McCobb
Notary Public.

* * * * *

122 THE JOINT AND SEVERAL ANSWER OF THE DEFENDANTS SPLITDORF ELECTRICAL COMPANY AND THE SUMTER ELECTRICAL COMPANY.

(Filed December 14, 1915.)

These defendants, Splitdorf Electrical Company (sued as Splitdorf Electric Company), a corporation of the State of New Jersey, and Sumter Electrical Company, a corporation

of the State of South Carolina, for their joint, several and respective answers to the Bill of Complaint of the plaintiff herein, as now amended, respectfully, each for itself, say:

1. These defendants admit that the allegations contained in paragraphs numbered I., III. and VI., XXVI. and XXVII.

2. These defendants, answering the allegations of paragraph II. of the Bill as amended herein, deny, upon information and belief, that the said contract of license therein referred to and marked Exhibit "A", attended to the Bill as amended, is in force and effect between the parties thereto, or was in force and effect prior to the execution and delivery by the defendants, T. Emil Podlesak and Henry J. Podlesak, of the assignment designated and known as the

123 "Splittdorf Contract" attached to the Bill as amended and marked Exhibit "F"; but, further answering, say that the allegations of said paragraph II. are immaterial and impertinent as to these defendants, because neither of these defendants is in the said Bill charged with having infringed, at any of the times mentioned in the Bill as amended, any of the patents referred to and covered by the said Exhibit "A".

3. These defendants admit the allegations contained in paragraph IV. of said Bill as amended, excepting, however, the allegation therein contained that the instrument of license, Exhibit "C", granted "all privileges and rights of action as might accrue under" the patents set forth in said paragraph, and deny that such instrument of license granted such rights; but say that such rights so granted were limited to the right "to bring and maintain suits against infringers of the patent rights covered by the said inventions" set forth in said contract of license, Exhibit "C".

4. These defendants admit the allegations contained in paragraph V. of said Bill as amended, excepting, however, the allegations therein contained that the instrument of license, "Exhibit "D", granted the right of action against infringers accruing under said patents referred to in said paragraph, and deny that such contract of license granted such a right; but say that the right so granted was limited to the right "to bring and maintain suits against infringers of the patent rights covering the said inventions" set forth in said Exhibit "D".

5. These defendants allege that they have no knowledge or information, except as advised by the Bill as amended herein, upon which to form a belief as to the truth of the allegations contained in said paragraph VII. of said Bill as amended, ex-

cept that these defendants admit that from time to time the plaintiff adopted and incorporated into its commercial product certain inventions of the said T. Emil Podlesak; and these defendants allege specifically that prior to, or at 124 the time of, the execution and delivery of the assignment from Tesla Emil Podlesak and Henry J. Podlesak to these defendants,—designated in the Bill as amended Exhibit “F”, to wit: September 4, 1915,—they had no knowledge of, or any information whatsoever concerning, any such facts as alleged in said paragraph VII.

6. These defendants allege that they have no knowledge or information, except as advised by the Bill as amended herein, upon which to form a belief as to the truth of the allegations alleged in said paragraph VIII. of said Bill as amended; but allege specifically that prior to, or at the time of the execution and delivery of, the assignment from Tesla Emil Podlesak and Henry J. Podlesak to these defendants,—designated in the Bill as amended as Exhibit “F”, to-wit: September 4, 1915,—they had no knowledge of, or any information whatsoever concerning, any such facts as are alleged in said paragraph VIII.

7. These defendants admit, as alleged in paragraph IX. of the Bill as amended, that application was made by Emil Podlesak for Letters Patent on July 21, 1911, which resulted in the issue of Letters Patent No. 1,098,052, May 26, 1914, to said Emil Podlesak; but these defendants allege that they have no knowledge or information, except as advised by the Bill as amended herein, upon which to form a belief as to the truth of the remaining allegations contained in said paragraph IX. of said Bill as amended; but these defendants deny, upon information and belief, that the expenses of preparing and prosecuting the applications therein referred to in said paragraph IX. were borne by the plaintiff with the understanding and agreement that the plaintiff should, and did, have the exclusive right to make, use and sell said inventions upon the terms and conditions identical with those as set forth in the license agreement of November 2, 1908, Exhibit “A”; and, further, these defendants specifically allege that prior to, or at the time of the execution and delivery of, the assignment from Tesla Emil Podlesak and Henry J. 125 Podlesak to these defendants,—designated in the Bill as amended as Exhibit “F”, to-wit: September 4, 1915,—they had no knowledge of, or any information whatsoever concerning, any such facts as are alleged in said paragraph IX.

8. These defendants admit the allegations contained in

paragraph X. of the Bill as amended—that the defendant Henry J. Podlesak is a brother of Emil Podlesak, and is a registered Patent Attorney; and further admit that to some extent at least the said Henry J. Podlesak has co-operated with his brother Emil Podlesak in connection with some of the transactions between said Emil Podlesak and the said Henry J. Podlesak; but that as to whether he has been familiar with all of the transactions, or with all of the doings of the said Emil Podlesak in conjunction with his relations to the plaintiff, these defendants have no knowledge or information upon which to form a belief.

9. These defendants admit that the said defendant Emil Podlesak has made certain improvements in Inductor Alternators, Current Generators and Igniters for Internal Combustion Engines, and in Ignition Devices for Explosive Engines; but have no information or knowledge as to when those inventions were made by the said Emil Podlesak, as alleged in said Bill as amended, or any information concerning the same. These defendants deny, upon information and belief, that the said inventions were made as a part of the duties of said Emil Podlesak in connection with his employment by the plaintiff, or in the course of his employment by the plaintiff. These defendants have no information or knowledge upon which to form a belief as to the remaining allegations of the Bill as amended contained in said paragraph XI., particularly as to whether the said Emil Podlesak delayed and postponed the making of applications upon the said inventions, and deceitfully, wrongfully and fraudulently made applications for the same. These defendants have no information or knowledge, upon which to form a belief, as to whether the said Emil Podlesak made application through attorneys of his own selection and the selection of his brother, Henry J. Podlesak, without the knowledge or consent of the plaintiff, or as to whether said applications were surreptitiously and secretly and contrary to the letter and spirit of the then existing terms and conditions of the contract of employment between the plaintiff and the said Emil Podlesak; and, further, these defendants allege specifically that prior to, or at the time of the execution and delivery of, the assignment from Tesla Emil Podlesak and Henry J. Podlesak to these defendants,—designated in the Bill as amended as Exhibit "F", to-wit: September 4, 1915,—they had no knowledge of, or any information whatsoever concerning, any such facts as are alleged in said paragraph XI.

10. These defendants deny upon information and belief that

the inventions described in the Letters Patent recited in paragraph XII. of the Bill as amended were made, conceived of, developed and reduced to practice by the defendant Emil Podlesak as a part of the duty of said Emil Podlesak as an employee of the plaintiff, and deny, upon information and belief, that the same were made for the benefit of the plaintiff, as set forth in said paragraph XII.; and, further, these defendants allege specifically that prior to, or at the time of the execution and delivery of, the assignment from Tesla Emil Podlesak and Henry J. Podlesak to these defendants,—as designated in the Bill as amended as Exhibit “F”, to-wit: September 4, 1915,—they had no knowledge of, or any information whatsoever concerning, any such facts as are alleged in said paragraph XII.

11. These defendants have no information or knowledge, upon which to form a belief, as to the truth of the facts set forth in paragraph XIII. of the Bill as amended; and, further, these defendants allege specifically that prior to, or at the time of the execution and delivery of, the assignment from Tesla

Emil Podlesak and Henry J. Podlesak to these defendants,—designated in the Bill as amended as Exhibit “F”,

to-wit: September 4, 1915,—they had no knowledge of, or information whatsoever concerning, any such facts as are alleged in said paragraph XIII.

12. These defendants admit that on the 5th day of February, 1914, the plaintiff made and entered into two written contracts or agreements between the said Podlesaks, identified as Exhibits “C” and “D” in the Bill as amended herein, and that the said contracts were made and entered into at the same time, and as a part of the same transaction; but deny, upon information and belief, that said contracts were entered into as a result of demands and threats of the said Podlesaks. These defendants further allege that they have no knowledge or information, upon which to form a belief, as to the truth of the remaining allegations in said paragraph XIV contained; and, further, these defendants allege specifically that prior to, or at the time of the execution and delivery of, the assignment from Tesla Emil Podlesak and Henry J. Podlesak to these defendants,—designated in the Bill as amended as Exhibit “F”, to-wit: September 4, 1915,—they had no knowledge of, or any information whatsoever concerning, any such facts as are alleged in said paragraph XIV.

13. These defendants admit that on or about the 20th day of January, 1915, a supplemental agreement was entered into

between the Podlesaks and the plaintiff herein, which is marked as Exhibit "E" of the Bill as amended herein, and submit said contract for the determination of the Court as to its effect upon the preceding contracts of February 5, 1914, marked Exhibits "C" and "D" in said Bill as amended, and say they have no knowledge of the other allegations of said paragraph XV of said Bill as amended.

14. These defendants admit that the said defendant Emil Podlesak duly executed both the application for Letters Patent No. 1,055,076, referred to in paragraph XVI. of the 128 Bill as amended, and the Reissue therefor, but allege that they have no information or knowledge upon which to form a belief as to the truth of the remaining allegations as in this paragraph contained; and these defendants allege specifically that prior to, or at the time of the execution and delivery of, the assignment from Tesla Emil Podlesak and Henry J. Podlesak to these defendants,—designated in the Bill as amended as Exhibit "F", to-wit: September 4, 1915,—they had no knowledge of, or any information whatsoever concerning, any such facts as are alleged in said paragraph XVI.

15. These defendants deny that they have conspired or confederated together, or with either the said defendant Emil Podlesak or the defendant Henry J. Podlesak, to injure or ruin the business of the plaintiff, or to cheat or defraud the plaintiff out of its substantial rights under said contracts of February 5, 1914, Exhibits "C" and "D", or the contract of January 20, 1915, Exhibit "E"; and deny that they have been guilty of any fraud or corrupt conduct in conjunction with the said defendant Emil Podlesak or the said defendant Henry J. Podlesak in obtaining an assignment to them of the rights and interest remaining or vested in the said Podlesaks under and by virtue of said contracts Exhibits "C", "D" and "E" of the Bill as amended. These defendants have no knowledge or information upon which to form a belief as to whether the plaintiff has fully and faithfully kept and performed each and all of the terms and agreements on its part to be kept and performed in connection with said license contracts Exhibits "C", "D" and "E"

16. These defendants, answering the allegations of paragraph XVIII., deny that they, during all the times mentioned, or at any time, have been, or now are, dominated and controlled by the same individuals; deny that they, during the

times mentioned, have been, or now are, co-operating together, except as they jointly acquired certain rights under the contracts mentioned as Exhibits "C", "D" and "E" of the Bill as amended, and as they are now co-operating in 129 the defense of this suit; deny that they keep and maintain in Chicago, Cook County, Illinois, a common office; deny that their business has been, and now is, attended to, and taken care of, by the same individuals; deny that said Splitdorf Electrical Company has acquired, and now has full dominion and control over, said Sumter Electrical Company; but say that the Splitdorf Electrical Company has purchased the physical assets of the Sumter Electrical Company located in South Carolina; and deny that in any of their dealings, or in the dealings of either of them, with said Podlesaks, or either of them, or with each other, or in relation to the rights of the plaintiff, they have acted, or do now act, together in confederation, combination or conspiracy; and deny that they, or either of them, have ever threatened to, or that they intend to continue with one another to do so, or to do so at any time hereafter.

17. These defendants, answering the allegations contained in paragraph XIX., admit that for many years they have been, and are now, engaged in the business of manufacturing, selling and dealing in Electric Generators and Ignition Devices, and that they have been, and now are, active competitors of the plaintiff. These defendants deny that they have knowledge of any rights of the plaintiff in and to Letters Patent No. 1,101,956, and Reissue Patent No. 13,878, except as set forth and contained in the contracts of license of February 5, 1914, (Exhibits "C" and "D"), and the supplemental agreement of January 20, 1915, (Exhibit "E"), prior to the commencement of this suit; and deny that before the commencement of this action, or at any time, they have unlawfully and without right or allowance, made, used or sold, or authorized others to make, use or sell, the inventions set forth and claimed in Letters Patent No. 1,101,956, and Reissue Patent No. 13,878, within the Northern District of Illinois or elsewhere; or that they have been preparing, aiding and encouraging others so to do within the said District and Division, or elsewhere in the United States.

18. These defendants admit that suit was brought in the United States District Court, for the Eastern District of 130 South Carolina, at Charleston, South Carolina, against the defendant Sumter Electrical Company by the plaintiff

herein, with whom were joined Emil Podlesak and Henry J. Podlesak, in which infringement of Reissue Letters Patent No. 13,878 by the said Sumter Electrical Company was charged by the plaintiff, but these defendants allege that said suit was dismissed on or about September 23, 1915, by the plaintiff. These defendants deny that they have any knowledge or information upon which to form a belief as to the truth of the remaining allegations contained in said paragraph XX. of said Bill as amended.

19. These defendants deny that the said Emil Podlesak, or that the said Henry J. Podlesak, did, on or before the 20th day of August, 1915, advise and acquaint either of these answering defendants of the fact that a bill of complaint was in course of preparation, or had been prepared and forwarded to the Clerk of the United States District Court, for the Eastern District of South Carolina, in a suit of this plaintiff and the said Podlesaks against the Sumter Electrical Company for infringement of any patent or patents; and these defendants, further answering, deny, if called upon to traverse an allegation of a conclusion of law, that they did or have unfairly, fraudulently or wrongfully connived or conspired with the said Podlesaks, or either one of them, to violate any of the rights of the plaintiff under said license contracts and supplemental agreement, Exhibits "C", "D" and "E", or under any or all of the said Podlesaks' patents. And these defendants deny that they procured a pretended right to continue and engage in the manufacture, use and sale of Electric Generators and Ignition Devices embodying the inventions and improvements described and claimed in the Podlesak patents with intent to harrass and embarrass the plaintiff in the enforcement of whatever rights it may have under said patents, or with intent to defeat any such rights and the enforcement thereof against any person, corporation or firm violating or invading any such rights, or that they entered into a fraudulent and corrupt arrangement and conspiracy with the said Podlesaks, or either 131 of them, to obtain the assignment to them of any pretended right, title or interest in and to all or any of the said Podlesak patents, or any or all of the rights under said license contracts, and the said supplemental agreements, Exhibits "C", "D" and "E"; but, on the contrary, these defendants allege that they have paid, and have agreed to pay, a fair, adequate and full consideration, to-wit: Sixty-five Thousand Dollars (\$65,000), to the said defendants Podlesaks for the assignment to them of all and whatsoever rights re-

maintaining or vested in the said Podlesaks under and by virtue of said license contracts of February 5, 1914, and the supplemental contract of January 20, 1915, Exhibits "C", "D" and "E", with a knowledge only, at the time of and prior to the negotiations with said Podlesaks and the final execution and delivery to these answering defendants of the "Splitdorf Contract" of September 4, 1915, of the said license contracts, Exhibits "C", "D" and "E", and without any knowledge of any previous relationship existing between the plaintiff and the said Podlesaks, or either one of them, and without knowledge of any facts or circumstances whatsoever, with the exception of said contracts, Exhibits "C", "D" and "E"; and these answering defendants deny that said contracts was a mere pretense, or with the intent and purpose of in any way interfering with, or depriving this plaintiff of, any such rights as it may have, or may have had, under said contracts, Exhibits "C", "D" and "E", and under the said patents therein referred to.

20. These defendants admit that on the 4th day of September, 1915, they entered into the contract of assignment with the said defendants Podlesaks, Exhibit "F" in the Bill as amended, and designated herein as the "Splitdorf Contract", and that the same was duly executed and delivered by the said Podlesaks to these answering defendants; but these defendants deny that the execution and delivery of said contract was a fraudulent arrangement and conspiracy between the Podlesaks and these answering defendants, or any part or parcel thereof, and say that the same was entered into fairly between the parties, for a fair price, and in good faith, and in the firm belief that the said Podlesaks had
132 a right to enter into the said contract with these defendants; and these defendants, further answering, say that they were, or one of them was, informed in writing by the plaintiff, prior to the time they entered into the said contract, whereby they acquired the rights remaining in said Podlesaks, that said Podlesaks were the owners of said patents, and these defendants relied thereon, as well as upon the advice of counsel, in believing that the said Podlesaks were such owners, and paid, and agreed to pay, sums of money aggregating to-wit: Sixty-five Thousand Dollars (\$65,000) upon such belief and reliance, and plaintiff ought not now to be heard to assert that the said Podlesaks were not such owners. These defendants, further answering the allegations contained in said paragraph XXII. submit the said "Splitdorf Contract" for

the interpretation of the Court, and for the determination of the rights of these defendants therein and thereunder.

21. These defendants admit that at the time the said "Splitdorf Contract" was made and entered into, the said Podlesaks, or either one of them, were not engaged in the business of manufacturing, selling or dealing in, magneto ignition apparatus for internal combustion engines (electric generators and ignition devices), but deny that they, or either one of them, did not have any good will in, or right to the use of, the name Podlesak in connection with the sale of apparatus under the patents granted to them and referred to in the license contract, Exhibits "C", "D" and "E". These defendants have no knowledge or information, upon which to form a belief, as to whether the plaintiff has built up a large and extensive business of manufacturing, selling and dealing in such magneto ignition apparatus, nor any knowledge or information, upon which to form a belief, as to whether, at the time that the said "Splitdorf Contract" was made and entered into, the plaintiff had, and now has, a good-will connected with such business. These defendants have no knowledge or information, upon which to form a belief, as to whether

the devices manufactured by the plaintiff have become
133 known on the market by the name Podlesak. These defendants deny that they have ever threatened to sell or place upon the market devices manufactured either by the Sumter Electrical Company of South Carolina or by the Splitdorf Electrical Company of New Jersey, or through or by any other Company, the Electric Generators and Ignition Devices bearing the name "Podlesak" thereon, with the intent and design to deceive purchasers and users into the belief that the apparatus so sold or placed upon the market is the apparatus sold or placed upon the market by the plaintiff; and further allege that their intent and purpose, if the name "Podlesak" is ever used in conjunction with the sale and placing on the market of apparatus of this character, is to so plainly mark or designate such apparatus as of their own manufacture that the public cannot and will not be deceived or misled into the belief that such apparatus was manufactured and sold, or placed upon the market, by the plaintiff. These defendants deny, upon information and belief, that the plaintiff has spent large sums of money in creating a public demand by advertising the Electric Generators and Ignition Devices of its manufacture and sale under the name, and in connection with the name, "Podlesak", in order to bring the said apparatus to the knowledge of the public; and

deny, upon information and belief, that the plaintiff has acquired an extensive and valuable reputation throughout the United States and foreign countries by reason of its efforts and labors, and that it has expended large sums of money in advertising and in advancing the sale of the said Electric Generators and Ignition Devices of its manufacture and sale under the name "Podlesak". These defendants further deny that the said Henry J. Podlesak, or the said Emil Podlesak, within the Eastern Division of the Northern District of Illinois, or elsewhere, have aided, abetted or encouraged these answering defendants, or either of them, in any infringement, or threatened infringement, of the rights of the plaintiff in and to the patents set forth in the Bill as amended, or in the alleged proposed and threatened unfair competition of these defendants; and these defendants further deny that either the said Henry J. Podlesak, or the said Emil 134 Podlesak, or both of them, have agreed, with these answering defendants, or either of them, in the future to aid, abet, encourage or assist these answering defendants in any infringement of, or infraction of, the plaintiff's rights in and to said patents, or in any unfair competition with the plaintiff, as alleged in said paragraph XXIII.

22. These defendants admit that when the said "Splitdorf Contract" was entered into between the said Podlesaks and these defendants, they had knowledge of the license contract and supplemental agreement, Exhibits "C", "D" and "E", between the Podlesaks and the plaintiff, and of any and all such rights as the plaintiff may have thereunder; but these defendants allege that said "Splitdorf Contract" was not a breach of said contracts, Exhibits "C", "D" and "E", nor any violation of the plaintiff's rights thereunder; and further allege that said "Splitdorf Contract" was not fraudulent and corrupt, nor made with a view to cheat or defraud the plaintiff out of any of its just rights under said contracts with the said Podlesaks. These defendants deny that under the contract between the plaintiff and the said Podlesaks, contracts Exhibits "C", "D" and "E", or any of them, the said Podlesaks held any title in and to the patents and applications for patents embodied in said contracts in trust for the plaintiff; and further deny that these answering defendants took such title of the Podlesaks and held, and now hold, the same as Trustees of the plaintiff; and further deny that these defendants are chargeable with the duties and obligations of Trustees to the plaintiff; but these defendants, further answering, say that if there was any trust or fiduciary relation

between them and the said Podlesaks, these defendants had no knowledge of same, if such there was, and ought not now to be held to know the same or bound to respond to any fiduciary relationship and its attendant obligations and burdens toward the plaintiff by reason of anything specifically alleged in the said Bill as amended, or, in fact, existing; and further answering, say that each of these defendants, and said plaintiff, have always been utter strangers to each other, and have had, 135 and have now, no privity of contract with each other, except as these defendants have succeeded by said assignment to the interests of said Podlesaks in said patents and the royalties to be derived and paid therefrom and therefor. These defendants further deny that they have undertaken to, or have betrayed, any trust created by virtue of said contracts between said Podlesaks and the plaintiff, because they deny the existence of any such trust as aforesaid, and also deny that the payment of moneys to the said Podlesaks and the agreement to pay moneys to said Podlesaks is in aid of their commercial piracy to so betray any trust.

23. These defendants admit that they have offered for sale, and are now manufacturing and offering for sale, Magneto Ignition Apparatus involving some of the inventions described and claimed in the patents included in the license contract Exhibit "D", but deny that they have offered for sale, and are now manufacturing and offering for sale any Magneto Ignition Apparatus, or any other apparatus involving any invention described and claimed in any one of the patents included in the contract Exhibit "C" between the plaintiff and the said Podlesaks; and these defendants deny that they intend hereafter to manufacture and offer for sale any invention described and claimed in any one of the patents referred to or embodied in said license contract Exhibit "C"; and these defendants further deny any intention to designate any apparatus made by it by the name "Podlesak" except in conjunction with such a plain designation of their own manufacture as will not deceive or be calculated to deceive the public into the belief that the apparatus is made by the plaintiff. These defendants deny that they knew, or should have known, by reason of anything alleged in the Bill as amended, if such be the case, which defendants likewise deny, that the said Podlesaks had no right, power or authority to give or grant the right to the defendants to manufacture and offer for sale such Magneto Ignition Apparatus as is covered by the patents referred to; but say that the contrary is the fact, as hereinbefore set forth.

136 24. These defendants deny that it is and was the main purpose of these answering defendants to obtain access to the books of account of the plaintiff in order to pry into and get the secrets of the plaintiff's business, and the names and locations of the plaintiff's customers, together with the amount of business done with them, and the prices at which the plaintiff's products were sold, and, therefore, deny any intent to fraudulently, unfairly and unjustly interfere with the trade and business of the plaintiff and injure, and, if possible, ruin such business, as set forth in said paragraph XXVIII.

25. These defendants deny that they will, at any time hereafter, attempt to intervene into any and all litigation which this plaintiff may bring to protect its rights under contracts Exhibits "C", "D" and "E", as against infringers of the patents mentioned in said contracts of license, or to harrass and annoy the plaintiff, or to defeat its rights; and deny that they have planned or made any fraudulent arrangement or conspiracy with said Podlesaks to prevent the plaintiff from instituting or maintaining any suits which it has the right to institute and maintain under and by virtue of said license contract.

26. These defendants have no knowledge or information upon which to form a belief concerning the plaintiff's business, as to whether the same has not been profitable, and is not now profitable, or whether its stockholders have made good from time to time its losses, or whether the plaintiff has ever been able to pay dividends, nor have any information or knowledge as to what salary was paid to the said Emil Podlesak, or whether that was ever larger than that received by any other officer or employee of the plaintiff; and also have no knowledge or information concerning any royalties paid by said plaintiff to the said Podlesaks, or as to when the said Emil Podlesak terminated his employment with the plaintiff. And these defendants are informed by the defendant Emil Podlesak that he has never boasted on any occasion that he would bring about injury and disaster to the
137 plaintiff, and that if any such boasts have been made they were the result of mere momentary irritation, and for which these defendants were, and are, in no way responsible. And these defendants deny that they have ever entered into any arrangement or conspiracy with the said Podlesaks in connection with the alleged plan of said Emil Po-

dlesak to ruin the plaintiff's business, as alleged in said paragraph XXX of said Bill as amended.

26-1/2. These defendants deny all of the allegations contained in paragraphs XXXI. and XXXII. of said Bill as amended, with the exception of the allegation as to the value of plaintiff's rights under the Podlesak patents, which these defendants admit is in excess of the sum of Three Thousand Dollars (\$3,000).

27. In each instance where, in this, their answer, these defendants have denied knowledge of the matters averred in the said Bill as amended, they ask that their said statements that are without knowledge shall operate as their denial, agreeably to the rules of practice in equity.

28. These defendants allege that prior to entering into the said "Splitdorf Contract" with the said Podlesaks, they had knowledge of, and relied upon, a representation, in entering into said contract, which was made by the plaintiff to one H. R. VanDeventer, then, and now, the General Manager of the Sumter Electrical Company of Sumter, South Carolina, which said representation was contained in a certain letter duly signed by the plaintiff company, through and by T. K. Webster as General Manager of the plaintiff, and duly received by the Sumter Electrical Company of South Carolina in the ordinary course of mail delivery, which said letter is hereto attached, made a part of this answer, and marked Exhibit 1.

29. These defendants allege that prior to the entering into of said "Splitdorf Contract", they had knowledge of, and relied upon, certain representations of the plaintiff, in entering into said contract, which are contained and embodied 138 in the bill as amended, filed in the suit of the plaintiff and the Podlesaks jointly against the Sumter Electrical Company of South Carolina, in the United States District Court, for the Eastern District of South Carolina, and which said allegations are as follows:

"that heretofore, by instruments in writing duly signed and delivered, the said Emil Podlesak, one of your orators, sold, signed and transferred unto Henry J. Podlesak, another of your orators, an undivided interest in the invention disclosed in said reissued Letters Patent No. 13,878, and thereafter said Emil Podlesak, and Henry J. Podlesak, by instrument in writing duly executed and delivered, granted unto the said Webster Electric Company, a license to make, use

and sell the invention described in said reissued Letters Patent No. 13,878, and that your orators are now the sole and exclusive owners of said Letters Patent and are entitled to all of the rights and privileges granted and secured or intended to be granted and secured thereby, and are entitled to all the benefits and advantages and moneys that may be recovered for the infringement or violation of said reissued Letters Patent. Proffer is made of said instruments in writing, to be produced in court when necessary."

30. These defendants allege that prior to the entering into of said "Splitdorf Contract", they had knowledge of, and relied upon, certain other acts and representations of the plaintiff in entering into said contract, among which are the allegations contained in a Bill of Complaint filed by the plaintiff in the District Court of the United States, for the Eastern District of Michigan, in a suit wherein the plaintiff and the defendants Podlesaks were plaintiffs and the Alamo Manufacturing Company was defendant, and the fact that the plaintiff treated the said license contract attached to the Bill as amended as Exhibit "C" as an assignment and recorded the same as an assignment in the Patent Office, while it did not so treat the said license contract attached to the Bill as amended as Exhibit "D", but, on the contrary, never recorded the said last mentioned license contract in the Patent Office.

31. And, further answering, these defendants say that the business of these defendants connected with, and incidental to, the manufacture and sale of apparatus similar to that described in the patents referred to in the license contract, Exhibit "D", of said Bill as amended, together with the or-

139 ders now on hand, amounts to the sum of approximately

One hundred and fifty thousand dollars (\$150,000); and these defendants further say that the net worth of the defendant Splitdorf Electrical Company, over and above all its liabilities, is not less than Two Million Dollars (\$2,000,000), and that the net worth of the defendant, Sumter Electrical Company, over and above all its liabilities, is not less than Six hundred thousand dollars (\$600,000), and these defendants, further answering, allege that there exists no such imminent, irreparable injury to the alleged rights of the plaintiff as should warrant the granting of a preliminary injunction restraining the defendants from the continuation of their manufacture, sale and use of the apparatus described in, and covered by, the claims of the patents referred to in the license

contract, Exhibit "D", since, as above set forth, the said defendant corporations are abundantly able to respond and pay any judgment for profits and damages herein, and because the injury to the defendant corporations in preliminarily enjoining their manufacturing, using and selling such apparatus would, as these defendants allege, injure, if not ruin, their business in connection with the manufacture and sale of said apparatus.

32. These defendants, and each of them, ask and move that this suit be dismissed, and all and singular the relief prayed be denied the plaintiff for the following reasons, arising, as matters of law, upon the face of the Bill as amended and insufficiency of the Bill in point of fact to constitute a valid cause of action in equity.

(a) The facts and circumstances alleged in the Bill as amended concerning the relationship between the defendants Podlesaks, or either of them, and the plaintiff, by virtue of employment by the plaintiff-company of Tesla Emil Podlesak, did not, by reason thereof, vest in the plaintiff, any right, title or interest in the patents referred to in the Bill as amended.

(b) The facts and circumstances set forth in the Bill as amended, by virtue of which it is claimed that the plaintiff acquired a right, title or interest in said patents, 140 apart or aside from the contracts referred to in the Bill as amended, and made exhibits thereto, did not vest in the plaintiff any more right or interest, if any right at all, other than a mere non-exclusive license or shop right, and the Bill as amended does not set forth any facts from which it can be found that any greater right or interest became vested in the plaintiff by reason thereof, or now is vested in the plaintiff, than the right or interest vested in the plaintiff in and by virtue of the contracts of February 5, 1914, (Exhibits "C" and "D"), and January 20, 1915, (Exhibit "E").

(c) That the Bill as amended fails to allege any facts or circumstances from which fraud, deceit or wrongful conduct or duress on the part of the defendants, or any one of them, can be inferred; fails to allege any facts which establish, or tend to establish, any wrongful conspiracy to injure the plaintiff's business; fails to allege any facts establishing or creating any trust relationship between the plaintiff and the defendant; and fails to allege any facts from which it may be found and held, as a matter of law, that the defendant Emil

Podlesak agreed to assign his inventions to the plaintiff while in its employ.

(d) That the Bill as amended shows that these defendants have not, and could not have, infringed any of the patents set up therein, or alleged to be infringed thereby.

(e) That the Bill as amended asks relief by way of construction and interpretation of the contract of license Exhibit "D", and that the "Splitdorf Contract" be declared null and void, and such relief cannot be granted because the cause of action attempted to be set forth in the Bill as amended is essentially and primarily for infringement of patents, and the only question presented is as to whether the Podlesaks could give, and these defendants did take, the right to make, use and sell apparatus under the patents referred to in said contract of license Exhibit "D".

141 (f) Because the facts and circumstances alleged in the Bill as amended are not sufficient to establish any trust relations between the plaintiff and any of the defendants, for the reason that all the transactions stated as a foundation for the trust relations claimed, occurred at a time previous to the time of entering into the written agreements between the plaintiff and the Podlesaks mentioned in the Bill as amended, and all such claims were waived by plaintiff when it made and entered into the said agreements in writing, Exhibits "C" and "D".

(g) That no facts are alleged in the Bill as amended constituting unfair competition by these defendants.

(h) That it appears from the Bill as amended that the rights and interests of the plaintiff under the patents alleged to be infringed, were fixed and determined by contracts Exhibits "C", "D" and "E", and that the facts and circumstances alleged in the Bill as amended, outside of said contracts, are not admissible.

(i) That the Bill as amended fails to allege any facts or circumstances from which it appears that the defendants did know, or should have known, that the said Podlesaks had no power to grant, and the said defendants had no right to take, the right to make, use and sell the inventions described in, and covered by, the patents referred to and embodied in the license contract Exhibit "D".

(j) The said Bill as amended is founded on alleged facts and circumstances outside of the face of the contracts referred to, which alleged facts and circumstances are traversed

in this answer, and unless the same are established by proof, no preliminary injunctive relief, can, or should, be granted.

32. And, by way of stating their set-offs or counter-claims, defendants for this purpose adopt all and singular the matters and things hereinbefore set forth, and allege and respectfully pray that their rights in and under the said con-

142 tracts, and each of them, attached to the said Bill of Complaint as amended, as Exhibits "C", "D", "E" and "F", may be by this Honorable Court fully and finally heard, adjudged and decreed on the merits, to the end that there may be an avoidance of multiplicity of suits, and that all doubts or uncertainties in the premises may be put an end to; the plaintiff may be decreed to account to these defendants, as the successors in interest and assignees of said Podlesaks, for the royalties, and all of them, mentioned in said contracts, or any of them, and for such other and general relief in the premises as to equity shall be meet and to this Honorable Court seem just and equitable; and these defendants aforesaid will every pray, etc.

SPLITDORF ELECTRICAL COMPANY

By CHARLES C. BULKLEY,

DAVID B. GANN AND

GEORGE H. PEAKS,

Its Solicitors.

SUMTER ELECTRICAL COMPANY

By F. C. MANNING,

Vice-President.

State of Illinois }
County of Cook } ss.

F. C. MANNING, being first duly sworn, on oath deposes and says: That is is the Vice-President of the Sumter Electrical Company, one of the defendants in the above-entitled cause; that he has read the bill of complaint as amended, filed in the above and foregoing entitled suit, and the above and foregoing joint and several answer of the Splitdorf Electrical Company and the Sumter Electrical Company, two of the defendants, which said answer has been subscribed by him as Vice-President of, and on behalf of, the defendant the Sumter Electrical Company, and that the said answer is true

143 of his own knowledge, except as to such matters as are

therein stated to be alleged on information and belief, and as to such matters so stated to be alleged on information and belief, he believes them to be true.

F. C. MANNING

Subscribed and sworn to before me at Chicago, Illinois, this 14th day of December, A. D. 1915.

CHARLES C. STRICKLAND
*Notary Public in and for the County
of Cook and State of Illinois.*

144

(EXHIBIT NO. 1.)

The Webster Electric Company

Racine, Wisconsin.

U. S. A.

January 2nd, 1914.

Mr. H. R. Van Deventer,
Sumter, South Carolina.

Dear Sir:

I beg your indulgence for neglecting so long to answer your letter of December 18th. The pressure of business at the end of the year must be my excuse.

The letter which Mr. Podlesak wrote you under date of the 15th was meant to be purely a personal matter and to inform you regarding some points in this art which perhaps you may not have been acquainted with.

Our attorney, Mr. Lynn A. Williams, has entire charge of our patent business and will write you at once regarding this whole situation.

I appreciate your courtesy in writing me so fully, and appreciate your attitude. Having had an extended experience with patents, I am sure that the manufacturer cannot profitably spend money in patent litigation as there are very few patents that have been issued that are worth it. I shall hope that your clients and ourselves may work together in harmony, as there is no doubt but there is sufficient magneto business in the country to satisfy us both. Mr. Harry Podlesak and brother Emil are the owners of the patents under which

we manufacture, and because of this, Mr. Podlesak wrote his first letter.

Yours very truly,

THE WEBSTER ELECTRIC CO.

(Signed) By T. K. WEBSTER

President.

TKW:DF

* * * * *

14. 145 SEPARATE ANSWER OF DEFENDANT HENRY JOSEPH PODLESAK.

(Filed December 14, 1915)

To the Honorable, the Judges of the District Court of the United States for the Northern District of Illinois, Eastern Division:—

I.

The defendant Henry Joseph Podlesak, for his separate answer to the bill of complaint as amended, filed by the plaintiff in the above entitled action, admits, denies and alleges as follows:

Said defendants admits that the plaintiff was and is a corporation chartered and existing under and by virtue of the laws of the State of West Virginia, and has its principal place of business at Racine in the County of Racine, State of Wisconsin. This defendant admits that the defendant Henry Joseph Podlesak was at the time of the commencement of this action, and now is, a citizen, resident and inhabitant of the Northern District of Illinois, and has a regular and established place of business therein; and on information and belief defendant admits that the residence and citizenship of the defendants Sumter Electrical Company and Splitdorf Electrical Company are in the States of South Carolina and New Jersey as stated in said bill. Defendant admits and alleges that since the 26th day of May, A. D. 1913, the defendant Tesla Emil Podlesak has been, and now is, a citizen 146 of the State of Wisconsin and a resident and inhabitant of the City of Racine, Racine County, in the Eastern District of Wisconsin.

Defendant denies that he has committed, or contributed to, any acts of infringement of plaintiff's patents or any of them, or of any patents in which said plaintiff has or claims any

interest, within said Northern District of Illinois, Eastern Division, or elsewhere.

As to whether the defendants Sumter Electrical Company and Splitdorf Electrical Company, or either of them, have any regularly established or regular and established places for doing business and duly appointed agents or officers located in the City of Chicago, State of Illinois, in this division and district, or elsewhere in said State, this defendant is without knowledge.

II.

Said defendant alleges and now here moves this Honorable Court that this action be dismissed as to him, and that he be permitted to go hence, for the reason that said bill of complaint as amended does not state facts sufficient to constitute a cause of action in favor of the plaintiff and against this answering defendant, and is insufficient in point of fact to warrant the relief prayed for and to warrant any relief in plaintiff's behalf against this defendant,—in that:

(a) Because the facts and circumstances alleged in the Bill of Complaint concerning the relationship between T. Emil Podlesak in virtue of his employment by the plaintiff company did not, by reason thereof, vest any right, title or interest in the patents referred to in the Bill of Complaint.

(b) Because the facts and circumstances set forth in the Bill of Complaint by virtue of which it is claimed that the plaintiff acquired some right or title apart or outside the contracts made a part of the bill, do not confer upon the plaintiff any more, if any, right or interest than a mere shop right 147 or a license, and the bill of complaint does not set forth any grounds upon which to find that the title became vested in the plaintiff by reason thereof.

(c) That it appears affirmatively on the face of said bill that on August 17, 1912, the defendants Podlesak, by and under the contract Plaintiff's Exhibit B, transferred each to the other the interests in the letters patent and applications for patent in said contract Exhibit B described; and that in and by said contract the defendant Tesla Emil Podlesak did on the consideration therein mentioned assign, transfer and set over unto this defendant Henry Joseph Podlesak a 51/100 interest of, in and to the inventions, patents and applications for patents on the inventions of said Tesla Emil Podlesak described in paragraph or subdivision 1 on pages 3 and 4 of said bill of complaint and which said plaintiff now claims to

own by virtue of the employment of said Tesla Emil Podlesak in plaintiff's service, as more fully set out in subdivisions VIII to XVI of said bill of complaint, to which reference is hereby made; and that said transfer Exhibit B is not in any manner assailed in said complaint, and no rights are claimed by plaintiff in and to said patents and applications for patent in derogation of the rights of this defendant acquired under said Exhibit B.

(d) That it appears affirmatively upon the face of said bill of complaint that the plaintiff has, for a valuable consideration, under the contracts of February 5th, 1914, and January 20, 1915, Exhibits C, D and E of plaintiff's bill of complaint, waived and relinquished any rights the plaintiff might have had, or that plaintiff now claims to have, in the inventions of the defendant Tesla Emil Podlesak and the patents secured by and in the name of said defendant therefor; and that said plaintiff is estopped and precluded and should be held estopped and precluded, from now making any such claim

by and under said contracts, and by and under its allegations set forth in paragraphs or subdivisions IV, V, VI, XIV, XV, XVII, XXVIII, and on page 62 of plaintiff's bill of complaint, wherein it has conclusively elected to abide by each said contracts, Plaintiff's Exhibits C, D and E; and said bill of complaint does not state any facts or circumstances wherefrom it may be inferred and held that the Webster Electric Company was forced to enter into said contracts by reason of any fraud or legal duress.

(e) That said plaintiff having agreed with the defendants Podlesak that the contracts Exhibit C (See Bill, p. 82), Exhibit D (See Bill, p. 90), and Exhibit E (See Bill, p. 94) were and are assignable, and said plaintiff not having at any time prior to the commencement of this action made any claim that said contracts were not assignable, but on the contrary, said plaintiff having stood by and permitted said contracts to be and remain as originally written, and waited until after the Podlesaks had executed and delivered to the defendant corporations the assignment and contract Plaintiff's Exhibit F (See Bill, p. 95), should be held and adjudged guilty of such gross and inexcusable negligence, laches and delay, to the injury of this defendant, as to estop and preclude said plaintiff from now claiming other or different rights than have been granted it by the defendants Podlesak by and under said contracts, Exhibits C, D and E.

(f) That said plaintiff having agreed with this defendant under the contract Plaintiff's Exhibit D that the defendants Podlesak expressly reserved (See Bill, p. 85) the right to themselves to make, use and sell the inventions mentioned in said contract Exhibit D (See Bill, p. 83); and having further agreed (See Bill, p. 90) that said contract shall extend to and be binding upon the heirs, assigns and legal representatives of the parties of the first part therein, the defendants Podlesak,—plaintiff should be held and adjudged estopped and precluded from in any manner questioning the assignment by this defendant of his right, title and interest in said contracts 149 Exhibits C, D and E, and in the patents therein mentioned.

(g) Because the facts and circumstances alleged in the bill are not sufficient to establish any trust relation between the plaintiff and any of the defendants, for the reason that all the transactions stated as a foundation for the trust relations claimed, occurred at a time previous to the time of entering into the written agreements between the plaintiff and the Podlesaks mentioned in the Bill of Complaint, and all such relations, if any there were, became abandoned, and all such claims were waived by plaintiff when it made and entered into the said agreements in writing.

(h) That said Bill of complaint, as amended, does not state facts sufficient to constitute a cause of action in favor of plaintiff against the defendant Henry Joseph Podlesak, and is insufficient in point of fact to warrant the relief prayed for, or any relief in plaintiff's behalf upon any cause or causes of action for infringement of the patents therein charged to have been infringed, or the alleged contribution by this defendant to the infringement of the patents mentioned in said bill of complaint, since under the contract Exhibit D of said bill of complaint the defendants Podlesak had the right to manufacture and sell the devices embodying the inventions the patents on which are charged to have been infringed.

III

Defendant alleges that, if said bill states any cause of action against him, there is a misjoinder of causes of action in the bill of complaint herein, because the complaint alleges several causes of action, but the said several alleged causes of action are not joint, and the same liability is not asserted against all of the material defendants, and sufficient grounds

do not appear for uniting the causes of action in order to promote the convenient administration of justice, in that :

(a) The complaint charges infringement on the part 150 of the corporation defendants, by making, using and selling and importing into the Northern District of Illinois, Eastern Division, apparatus described and claimed in the Podlesak patents charged to be infringed in suit, and asserts liability against said defendants by reason thereof, but states no facts or circumstances showing such acts of infringement on the part of the Podlesaks and asserts no liability against them.

(b) The complaint charges the said Podlesaks, defendants, with certain delays, breaches of contract, deceitful, wrongful, and fraudulent actions, both individually and in co-operation and connivance with each other, in respect to their patents, inventions and applications for patents, prior to any alleged agreement or connection of said corporation defendants, with said Podlesaks, and asserts liability against said Podlesaks therefor, but sets forth no facts or circumstances to connect the said Electrical Companies, defendants, with the said wrongful acts on the part of the Podlesaks, and asserts no liability therefor against said defendant corporations .

(c) The complaint charges unfair competition in trade on the part of the corporation defendants, particularly, in the use of the word Podlesak in connection with the manufacture and sale of apparatus, and asserts liability against the said defendants therefor, but makes no charges supported by allegations of fact against the said Podlesaks, and asserts no liability against them in that regard.

(d) The complaint charges interference with litigation on the part of the corporation defendants, and asserts liability against them therefor, but makes no similar charges supported by allegations of fact against the Podlesaks, in respect of infringers other than the Electrical Companies, defendants, and asserts no liability therefor against the Podlesaks.

(e) The complaint alleges divers other several causes 151 of action and asserts liability thereon against the said

Podlesaks or either of them, and against the said defendant corporations or either of them, but does not allege any joint cause of action, supported by allegations of fact, excepting, that the bill charges conspiracy in that the Podlesaks, defendants, sold, and the Electrical Companies, defendants, purchased for a valuable consideration, the Podlesak patents, subject to the existing contracts mentioned in the bill of com-

plaint; and this defendant is advised by counsel, and so avers, that such charge is not sufficient to support the joinder of all the other dissimilar and separate causes of action without joint liability, which are hereinbefore set forth, and does not constitute sufficient ground for uniting the said several causes of action in order to promote the convenient administration of justice, particularly, because the various acts complained of are not related as parts of one general transaction, nor did the several alleged causes of action arise out of one general transaction, nor is there a common fact or set of facts or circumstances upon which the several unrelated causes of action depend, nor is there alleged in the bill any common ground for relief against the several defendants and in respect of the several causes of action set forth.

IV.

Defendant alleges further that there is a misjoinder of parties in the bill of complaint, herein, there being several defendants, but there not being a joint interest among all of the defendants in the several subjects of the action, in that:

(a) Neither of the defendants, the said Electrical Companies, has any unity of interest or defense with either or both of the said Podlesak Brothers, co-defendants, in respect to any sum or sums of money alleged in the bill to have been paid to the said Podlesaks by the plaintiff prior to the execution of the Splitdorf contract.

152 (b) Neither one nor both of the said Podlesaks have any unity of interest with either or both of the said Electrical Companies, co-defendants, in the unlawful competition alleged in the bill of complaint, as it does not appear in the said bill of complaint that either of the said Podlesaks is engaged in making, using or selling apparatus in infringement of the plaintiff's rights or any ignition apparatus whatsoever.

(c) Neither of the defendants, the said Podlesaks, has any unity of interest with either or both of the Electrical Companies, co-defendants, in any interference with litigation by said Electrical Companies, as alleged in the bill.

(d) Neither of the corporation defendants has any unity of interest with either of the said Podlesaks, co-defendants, in respect to acts alleged in the bill to have been done by one or both of the said Podlesaks, individually, or in connivance with each other, before the date of any connection or agree-

ment alleged in the bill between said Electrical Companies and the said Podlesaks.

And for all and singular the reasons hereinabove set forth, defendant says that the bill of complaint should be dismissed.

V.

1. This defendant, further answering, admits that Letters Patent of the United States Nos. 947,647; 948,483; 1,003,649; 1,056,360; 1,022,642; 1,101,956; 1,098,754; 1,098,052; 1,055,076 and reissue No. 13,878 were duly issued in manner and form as alleged in paragraph 1 of said Bill of Complaint excepting only that defendant alleges that patent No. 1,055,076 was granted March 4th, 1913, instead of March 14th, 1913, as erroneously alleged in said Bill of Complaint.

2. This defendant further answering admits that license agreement Exhibit A, referred to in paragraph 11 of said 153 Bill of Complaint, was entered into between this defendant and Emil Podlesak on the one hand, and Webster Manufacturing Company on the other hand, as per copy of said agreement attached to the Bill of Complaint; and denies the allegations of said Bill of Complaint as to the legal effect of said instrument, or that it contains any matter or purports to be anything different from what appears upon the face thereof.

3. And in this behalf, defendant alleges that said contract, Exhibit A, was by and in accordance with its specified terms of termination, on or about the 30th day of March, A. D. 1912, and thereafter on July 26th, 1912, canceled, terminated and annulled by this defendant and the defendant Emil Podlesak, because of the failure of the plaintiff Webster Electric Company, the assignee of the licensee therein named, to pay the royalties provided in said contract and to otherwise comply with the covenants, terms and conditions thereof on its part; that after said contract was annulled, this defendant and the defendant Emil Podlesak from time to time permitted the plaintiff, at its specific written request, to manufacture and sell certain of the devices in said contract described to fill orders which said Webster Electric Company then had, and not otherwise; and alleges further that after the termination of said contract, said Webster Electric Company had or retained no rights whatsoever thereunder, except the bare right, granted from time to time at plaintiff's specific request to manufacture and sell certain of said inventions, for the sole

purpose of filling orders secured by said plaintiff, at different times; that said termination and cancellation was at or about said last mentioned dates, to wit, March 30th, 1912, and on July 26, 1912, fully agreed to and acquiesced in by the plaintiff; and that because of the premises, said contract, Exhibit A, ceased to be effective for any purpose, and that said plaintiff had no rights thereunder.

154 4. This defendant further answering admits that this defendant entered into an agreement with said Emil Podlesak, referred to in paragraph III of said Bill of Complaint as Exhibit B, as per copy of said agreement attached to said Bill of Complaint, and admits that this defendant and said Emil Podlesak entered into three certain agreements with plaintiff, referred to in paragraphs IV, V and VI of said Bill of Complaint, as Exhibit C, Exhibit D and Exhibit E respectively, as per copies of said agreements attached to said Bill of Complaint, which latter agreement, Exhibit E, was supplemental to and in confirmation of the aforesaid agreements Exhibits C and D; and in connection with said Exhibits B, C, D and E, this defendant denies that they or any of them contain or were intended to contain anything other than as stated on the faces of said agreements, or that the legal effect of said agreements is any different from what said agreements on their faces purport to be, and specifically denies any and all claims of the plaintiff as to the legal effect of said agreements other than the same appears in each of said agreements.

5. This defendant further answering admits that plaintiff was and is authorized to manufacture and sell electric generators and admits that it has been engaged in said business; admits that said Webster Manufacturing Company and the plaintiff were engaged in attempting to develop and put upon the market electrical generators and ignition devices for explosive engines embodying the Milton and McInnerney patents referred to in paragraph VII of said Bill of Complaint, and alleges also that said Webster Manufacturing Company and the plaintiff attempted to develop and put upon the market similar generators and ignition devices under the Mears and Aylward inventions not referred to in the Bill of Complaint, and this defendant is informed and verily believes and so states the fact to be that said Webster Manufacturing Company or said plaintiff did not at any time
155 prior to the date of license agreement Exhibit A develop

a practical product or any business in respect thereof of any lucrative importance, if any at all; alleges that he has no knowledge of the amount of money spent by plaintiff in building up and developing the business of the manufacture and sale of ignition devices for gas engines, but, as this defendant is informed and verily believes, the greater part of the expenditure made by the plaintiff and said Webster Manufacturing Company was expended in the attempted development of the inventions of said Milton, McInnerney, Mears and Aylward, which resulted in a practical failure to produce commercial products; denies that any substantial part thereof was expended in the development of said business in reliance on the rights under the Podlesak patents; admits that the plaintiff now has a lucrative business based upon the manufacture and sale of electric generators and ignition devices embodying the inventions of the Podlesak patents enumerated in Exhibits C and D, but denies that the expending and lucrative business which has come to the plaintiff is due to the efforts of the plaintiff; denies that large or any substantial sums of money have been by said plaintiff invested in advertising and otherwise bringing its products to the favorable attention of prospective buyers and users.

6. In this respect, this defendant further answering states that long prior to his contractual relations with the plaintiff or Webster Manufacturing Company, to-wit, prior to the year 1900, this defendant had been employed by the leading gas engine builders in the United States in developing gas engines and ignition devices therefor; that he had contributed to the literature of the art in technical journals and had presented papers before engineering societies, whereby he enjoyed a wide and favorable reputation in the art of gas engine ignition; alleges that subsequent to the date of Exhibit A 156 and prior to the date of Exhibits C and D, on sundry occasions, this defendant although never in plaintiff's employ, at his own expense, called upon a large number of gas engine manufactures by whom he was then known in the interests of the electrical generator and ignition devices manufactured by the plaintiff under the Podlesak patents, and this defendant asserts that the growth of the business of the plaintiff in the manufacture and sale of its product made under the Podlesak patents has been largely, if not wholly, due to the fact that prospective buyers and users recognized said devices as "Podlesak" devices and purchased them by reason

of the favorable reputation which this defendant enjoyed among builders, dealers and users of gas engines, acquired as aforesaid; and this defendant denies that said plaintiff did by any of its efforts add to or increase the value of the name Podlesak or to the reputation of said Podlesak in the gas engine ignition or any field.

7. This defendant further answering avers that the license agreement, Exhibit A, was entered into at the urgent solicitation of Webster Manufacturing Company, which said agreement related to joint inventions of this defendant and said Emil Podlesak; that said inventions were invented and reduced to practice by the completion of commercial devices long prior to the date of said license agreement, Exhibit A, to-wit, shortly prior to the 25th day of September, 1901, that said inventions covered by said license agreement, Exhibit A, embodied and included the basic principles of the gas engine ignition devices manufactured by said Webster Manufacturing Company and Webster Electric Company, plaintiff herein; that the later inventions of this defendant and said Emil Podlesak, which were produced after the date of Exhibit A, and which were embodied, together with United States Letters Patent No. 1,056,360, in the shop right agreement Exhibit D, were auxiliary to the basic inventions embraced in Exhibit A, though not exclusively adaptable to or operable in connection therewith.

8. This defendant further answering admits that he 157 is a brother of the defendant Emil Podlesak, and is a registered patent solicitor, but in this behalf states that he is not now and never was an attorney at law and has never been licensed or admitted to practice law before any court; admits having and having had knowledge that said Emil Podlesak had become employed by said Hertz Electric Company, some time during August, 1909, upon written agreement; that this said agreement was terminated during March or April, 1910; that thereafter the plaintiff company made a new employment agreement, in writing, with Emil Podlesak, on May 18, 1910; that this last said agreement was terminated in March, 1913, by a new employment agreement, in writing, between said company and said Podlesak; denies that he has been or is now familiar with all transactions and doings of the defendant Emil Podlesak set forth in the Bill of Complaint; and denying any knowledge that said Emil Podlesak has been guilty of any wrongful conduct whatever, denies that

he has aided, assisted and co-operated with said Emil Podlesak in all or any of his transactions and doings with said plaintiff, or in any wrongful act whatsoever.

9. Defendant denies that this defendant has at any time prior to, at or subsequent to the 29th day of December, 1911, in co-operation or connivance with his said brother Emil Podlesak, assisted said Emil Podlesak to deceitfully, wrongfully and fraudulently make applications for United States Letters Patent covering the inventions set forth in paragraph XI of the Bill of Complaint or any inventions; admits that this defendant did assist in the prosecution of some of the applications referred to in paragraph IX of said Bill of Complaint; denies that he prosecuted or directed the prosecution, or intended so to do, of any application or applications, for any such or any Letters Patent of the United States surreptitiously or secretly or contrary to the letter and spirit of any contract of employment between said Emil Podlesak and the

plaintiff herein, in a manner to induce or tending to induce said Emil Podlesak to violate such alleged contract;

denies that plaintiff was without knowledge of such applications or that plaintiff did not discover the facts until long after such applications were made,—but on the contrary this defendant specifically states and affirms that the inventions embraced in each and all of the applications of said Emil Podlesak referred to in said paragraph IX in said Bill of Complaint were offered to plaintiff by this defendant, as attorney in fact for said Podlesaks, for acceptance, some of which offers were made prior to the 30th day of March, 1912, the date of termination of license agreement Exhibit A, and others of which were offered to said plaintiff in a series of attempts by this defendant and Emil Podlesak to enter into an agreement with the plaintiff relative to said Podlesak patents subsequent to the termination of said agreement Exhibit A, and states that some or all of said inventions were embodied in the generating and ignition devices of said plaintiff as a result of said offers, and were made and sold by said plaintiff under the special limited permission granted to it, as heretofore stated, but that said plaintiff failed and refused to enter into a permanent arrangement with this defendant and said Emil Podlesak with respect to said latter application and invention until February 5th, 1914, when shop right agreement Exhibit D was entered into.

10. This defendant further answering denies that plain-

tiff filed and prosecuted, by attorneys of its designation and at its expense, said application Serial No. 639,738, and states the fact to be that this said application Serial No. 639,738 was prepared, and on July 21, 1911, was filed by attorneys designated by said Emil Podlesak and that the expenses of preparing, filing and prosecuting this said application were made at the expense of and paid by the defendants Podlesak; and that such said payments were duly receipted as paid by said Emil Podlesak.

11. This defendant further answering admits that the ignition device set forth in his Letters Patent No. 1,022,642 159 is not an electric generator but is capable of use in connection with and as a part of ignition devices made and sold by the plaintiff; denies that said invention is useful only when incorporated in or used in connection with or as part of electrical generators and ignition devices such as were manufactured, sold and dealt in by the plaintiff as set forth in paragraph XIII of the Bill of Complaint, and alleges that, on the other hand, the device of said last mentioned patent was capable of use in connection with a large number of ignition devices made by a large number of manufacturers throughout the United States and operating on principles entirely different from those manufactured and sold by plaintiff; and alleges that about forty thousand of such devices are now used; denies that he surreptitiously and with the connivance of said Emil Podlesak arranged to incorporate said invention into the electric generators and ignition devices manufactured, sold and dealt in by said plaintiff; denies that said device was so incorporated in the plaintiff's generators and ignition devices without its knowledge; denies that plaintiff was without knowledge of the incorporation of said last named invention in its ignition device at the time of its incorporation thereinto and denies that the plaintiff was without knowledge of this defendant's assertion as inventor until shortly before February 5th, 1914, but on the contrary this defendant states that said invention so set forth in said United States Patent in 1,022,642 was incorporated in the electrical generator and ignition devices of the plaintiff at the suggestion and request of said plaintiff and avers that said invention of Letters Patent No. 1,022,642 was not so adopted by plaintiff until about the month of September, 1912, or more than six months after the grant and publication of said patent.

12. This defendant further answering admits that he, on and after the 9th day of April 1912, and prior to the 5th 160 day of February, 1914, called plaintiff's attention to said patent 1,022,642 and to other inventions set out in paragraph XIII of said Bill of Complaint, but states that when plaintiff was by this defendant notified of such infringement license agreement Exhibit A had long theretofore been terminated by mutual consent of the parties, and by reason of default on the part of plaintiff; and further alleges that when said notice of infringement was served upon plaintiff by defendant, this defendant was not under any contractual relations of any kind whatsoever with the plaintiff under and by which said plaintiff had any right under said inventions or any of them; alleges that during the interim between the date of the termination of said license agreement Exhibit A and February 5th, 1914, plaintiff from time to time requested special permission from this defendant to make and sell devices under the aforesaid Podlesak patents and inventions on orders periodically received for such devices, and that limited and special permissions were granted upon such requests and were to be withheld by defendant whenever he saw fit so to do.

13. Answering further, this defendant states that, as he is informed and verily believes, some or all of the inventions described and claimed in Letters Patent No. 1,055,076 (Reissued as No. 13,878); No. 1,101,956, No. 1,098,754, and No. 1,098,052 may have been made by said Emil Podlesak during the time he was in the employ of the plaintiff under contract of May 18, 1910; and upon information and belief states that the plaintiff had no rights in these inventions other than the right to adopt said inventions pursuant to said contract of May 18, 1910, and did not at any time prior to February 5, 1914, intend or declare its intention to make for use and sale said inventions and paid no royalties thereon; and that the plaintiff only intended to make the current generators embodying inventions described and claimed in said Patents 161 Nos. 947,647; 948,483; and 1,003,649, or any of them, and to sell and supply such said generators to builders of gas engines, expecting and intending said gas engine manufacturers to make and supply any other parts necessary to complete the ignition outfit or unit, regardless of whether such said other parts might or might not infringe any or all of said Podlesak patents, granted or to be granted.

14. This defendant further answering denies that the invention covered by Letters Patent No. 1,022,642, hereinabove referred to, was so combined and so used in plaintiff's product that it could not be segregated without injury to plaintiff's business, and alleges the truth to be that the device of said latter invention could be segregated from plaintiff's product without in any manner impairing the utility thereof; denies that this defendant, either alone or in connivance or conspiracy with said Emil Podlesak, took advantage of this or any situation or of the knowledge of this defendant and said Emil Podlesak in relation the plaintiff's business; denies that he himself, or in connivance or conspiracy with said Emil Podlesak, forced said plaintiff by demands, threats or otherwise to enter into the two license agreements designated herein as Exhibits C and D; but, on the contrary, this defendant avers that said plaintiff, subsequent to the termination of license agreement Exhibit A and prior to the 5th day of February, 1914, the date of license agreements Exhibits C and D, repeatedly acknowledged the termination of said agreement Exhibit A and of the full right, title and interest of this defendant and said Emil Podlesak in and to the inventions and patents and each of them embraced in said license agreement Exhibit A, and in full acknowledgment and admission of said right, and of this defendant's interest in the inventions of said Emil Podlesak acquired under the contract Plaintiff's Exhibit B, said plaintiff did on or about the 5th day of February, for a valuable consideration, enter into the agreements with this defendant and said Emil Podlesak hereinbefore 162 referred to and known herein as Exhibit C and Exhibit D; and that when said agreements, Exhibit C and Exhibit D were entered into this defendant and said Emil Podlesak had good and lawful authority to grant the license rights therein granted and intended to be granted, which said rights and authority were specifically recited in said agreements, which were drawn by plaintiff's attorneys under plaintiff's direction, and admitted by the plaintiff by its acceptance of said agreements.

15. And in this behalf, this defendant alleges that the plaintiff has acquired the right to use the device set forth in United States Letters Patent No. 1,022,642 under agreement Exhibit D; alleges that the plaintiff has never in any manner been hindered in the use of said device under said agreement, and that it is not required to pay any royalty whatsoever

thereon so long as the device is incorporated in the ignition devices made and sold by plaintiff, and not sold as a separate and distinct device thereunder.

16. This defendant, further answering paragraph XV of the Bill of Complaint, admits the parties proceeded to act under agreements Exhibit C and Exhibit D until January 20th, 1915, at which time agreement Exhibit E was entered into; that the result of Exhibit E was intended primarily to operate as a reduction of the royalties on each magneto to be paid by plaintiff to the Podlesaks; that the negotiations which finally resulted in Exhibit E extended over five or six months, and that the final draft of said agreement was prepared by the attorney for the plaintiff, and was duly executed by all of the parties; and as this defendant is informed and verily believes, and so charges the fact to be, was in full and complete ratification of the aforesaid agreements, Exhibit C and Exhibit D; and this defendant denies that there existed prior to the execution of supplemental agreement Exhibit E any oral agreement or understanding relating to a change in royalties or the manner of payment thereof, and alleges that the only change made in agreements Exhibits C and D of 163 any kind or nature whatsoever is that set forth and embodied in the supplemental agreement Exhibit E aforesaid.

17. This defendant further answering admits that the fees, costs and expenses of preparing, filing and prosecuting said application for the reissue of said original Letters Patent No. 1,055,076 were borne by the plaintiff, and states that the plaintiff was obligated to bear this expense by the terms of said agreement Exhibit D, and as a part of the consideration thereof; and that said Emil Podlesak duly executed said application and did so by and under the terms and obligations of said contract Exhibit D; and this defendant states that the plaintiff's attorney received said Reissue Letters Patent No. 13,878, in document, and turned over and delivered the same to the Podlesaks, as to owners of all interest and title to and in said patent and of the patent itself; and further states that the reissuing of said patent No. 1,055,076 neither increased nor diminished the rights, granted the plaintiff under said contract Exhibit D, in any manner or degree whatsoever. This defendant denies that the plaintiff has or ever had any other right and alleges that plaintiff never had, and now has no title and no part of an interest in and to said

patent No. 1,055,076, nor in and to the reissue patent No. 13,878, but admits and points out that plaintiff had and has a shop right to make, use and sell the invention thereof, as provided in said contract Exhibit D.

18. This defendant, further answering, denies that the plaintiff has fully and faithfully kept and performed each and all of the terms of the agreements, Exhibit C, Exhibit D, and Exhibit E, on its part to be kept and performed, as set forth in paragraph XVII of said Bill of Complaint, and avers that said plaintiff has neglected and failed to fully and justly account to this defendant and Emil Podlesak for the number of devices made under and in accordance with said agreement, and has failed to pay to said Podlesaks the royalties 164 on the days when said royalties became due, and particularly has failed and neglected to account for and to pay over to said Podlesaks all the royalties which accrued for the quarterly period ending June 30th, 1915, and the royalties which accrued under said agreements to the defendants Podlesak prior to the assignment thereof, dated September 4th, 1915, Exhibit F of the Bill of Complaint, or for the quarterly period expiring September 30th, 1915, in accordance with the true meaning, intent and spirit thereof; and has sought to force and secure unwarranted deductions from the royalties for the quarter ending June 30th, 1915, and to go back of and surcharge accounts rendered and settled during previous quarterly periods, and has in its administration of said contracts construed them against the defendants Podlesak in a manner unduly harsh and severe for the purpose of endeavoring to enforce the allowance by the defendants, Podlesak, of deductions from the moneys justly due said defendants Podlesak; and has further breached said contracts as previously construed and acted upon by the parties hereto by cutting the making "Podlesak Patents" out of electrotypes and printed matter recently employed by the plaintiff to illustrate the Podlesak device in plaintiff's advertising matter in public journals, and by changing the marking "Podlesak Patents" on the devices themselves, manufactured and sold by said plaintiff, from a prominent and conspicuous place, as previously construed and acted upon by the parties to said contracts to an inconspicuous place where said name cannot be seen or read readily by prospective and intending purchasers thereof.

19. This defendant affirms that he has fully and faithfully

kept and performed all the conditions and covenants of said agreements, Exhibit C and Exhibit D, to be by him kept and performed, and denies that he himself or in concert or connivance with said Emil Podlesak or any other person, or for consideration paid or promised to be paid or otherwise fraudulently or corruptly conspired with the co-defendants Sumter Electrical Company and Splitdorf Electrical Company to cheat or defraud the plaintiff out of its substantial rights or any rights under said license agreements or either of them, or to injure or ruin the business of said plaintiff.

20. This defendant, further answering, denies that he has ever acted, or now acts, in confederation or conspiracy with the defendant corporations or with the defendant Emil Podlesak for any object or purpose whatsoever, in any manner having to do with the plaintiff; and further this defendant states he is without knowledge as to the remaining allegations of paragraph XVIII of said Bill of Complaint.

21. This defendant admits on information that Splitdorf Electrical Company and Sumter Electrical Company are engaged in a business similar to that of plaintiff, that defendant is without knowledge of the alleged infringement of Letters Patent No. 1,101,156 or Reissue Letters Patent No. 13,878, set forth in paragraph XIX of the Bill of Complaint except as contained in said Bill and neither denies or affirms the same.

22. This defendant, further answering, denies that he called plaintiff's attention to the alleged fact that the said defendant corporations or either of them were infringing any of the Podlesak patents; denies that the alleged infringement of Reissue Letters Patent No. 13,878 was brought to the attention of plaintiff by this defendant, and denies that this defendant urged and insisted that said suit be brought against Sumter Electrical Company under said Reissue Patent No. 13,878, as set forth in paragraph XX of said Bill of Complaint; but on the other hand asserts that this defendant joined in said Bill of Complaint against the Sumter Electrical Company at the urgent and initial request of plaintiff herein and with some reluctance to himself, and that his reluctance grew out of his then unformed opinion as to the fact of infringement charged; denies that the attorneys who represented 166 resented the co-plaintiffs in the suit against Sumter Electrical Company were the attorneys of this defendant in fact, and alleges that said attorneys were not employed by

this defendant in said suit, but were employed and paid for solely by plaintiff herein and solely by virtue of its supposed authority in and under said agreement, Exhibit D; and this defendant is informed and verily believes and so states the fact to be, that said suit was instituted by the plaintiff herein against Sumter Electrical Company under said Reissue Patent No. 13,878 for special purposes of the plaintiff, knowledge of which, at the time of bringing said suit was withheld from this defendant, to-wit, as a means to induce or force said Sumter Electrical Company and Splitdorf Electrical Company to enter into certain contractual relations with said plaintiff solely for the financial gain and advantage of the plaintiff.

23. This defendant, further answering, denies that prior to, at or since said Bill of Complaint against Sumter Electrical Company was prepared, this defendant, either acting alone or in connivance with said Emil Podlesak or with any other person whomsoever, approached the Splitdorf Electrical Company and Sumter Electrical Company, or either of them, directly or indirectly, and advised said companies of the pendency of said suit; denies that he connived and conspired with said Sumter Electrical Company and Splitdorf Electrical Company, or either of them, directly or indirectly, unfairly or wrongfully, to violate the rights of the plaintiff herein under said license agreements and supplemental agreement Exhibit C, Exhibit D, and Exhibit E, or either of them, or under the aforesaid Podlesak patents, and denies that he in any manner did any act to unfairly or in any other manner give said Splitdorf Electrical Company and Sumter Electrical Company an unfair advantage of the plaintiff; denies that he entered into a fraudulent or corrupt arrangement with said companies or either of them, directly or indirectly, as and for the purpose set forth in paragraph XXI or for 167 any other purpose whatsoever.

24. This defendant admits the execution and delivery, on September 4, 1915, of the assignment and contract marked Exhibit F, and termed the "Splitdorf Contract" in the Bill of Complaint, between the defendants Podlesak and the defendant corporations, and admits that the copy attached to plaintiff's Bill of Complaint is substantially correct, barring typographical errors, and excepting that on the first page of said copy, Exhibit F, letters patent No. "947,647" is erroneously numbered "949,647", and that near the bottom of the page 96 of said Bill of Complaint, and between the word "ap-

plications" and the words "said agreements" the word "or" is erroneously written "on". Defendant denies that he entered into any fraudulent or corrupt arrangement or conspiracy with the defendant corporation; denies that said contract Exhibit F was or is a pretense, and admits and alleges that under and by said contract Exhibit F this defendant did sell and assign to the defendant corporations all that said contract specified by its terms; admits the receipt by the defendants Podlesak of the first payments, aggregating the sum of \$25,000; and as to the remaining allegations, denies that said contract was executed by the defendants Podlesak pursuant to any fraudulent arrangement or conspiracy, or as part and parcel thereof, and denies that said contract Exhibit F was executed for any ulterior purpose whatsoever, or for any purpose or to accomplish any aim or object or to grant any rights other or different from what said contract Exhibit F contains on its face; and alleges that if, as claimed in the Bill of Complaint, said defendant corporations have made, or are attempting to make, any wrongful or improper use of said contract, it is without the knowledge, consent or approval of this defendant; and as to the remaining allegations of paragraph XXI of said Bill of Complaint, defendant alleges that he is without knowledge.

25. Answering the remainder of paragraph XXII, defendant denies that contract Exhibit F is susceptible of any different construction from what said contract contains on the face thereof, and alleges that the allegations of paragraph XXII are irrelevant and redundant, and that this defendant ought not to be required to answer same.

26. Answering paragraph XXIII, defendant alleges that long prior to the time of the execution of the contract of November 2, 1908, plaintiffs Exhibit A, and prior to the time the defendant Emil Podlesak entered into the employ of the plaintiff, the defendants Podlesak had built up and established a good reputation in the field of the development and manufacture of magneto ignition and other apparatus for firing the gas in the combustion chamber of internal combustion engines; that at the time of the execution of the "Splitdorf Contract" Exhibit F, the defendants Podlesak had about completed preparations to enter the magneto business, had perfected workable magneto ignition apparatus, all to be manufactured under and by virtue of the rights remaining in them under Exhibit D, and were preparing to make deliveries commencing November 1, 1915. Defendant denies that the Podlesaks had

no good will be connected with that old or business, and denies that the only good will this answering defendant has was in connection with the plaintiff's business, denies that it was or is the purpose or intent of the Splitdorf contract to convey or to attempt to convey to the defendant corporation any part of the good will of plaintiff's business, or its right to use and apply the name Podlesak to the product of plaintiff manufactured or sold under the Podlesak patents, and alleges in this behalf that plaintiff has never advertised said device to the trade as the "Podlesak" magneto, but on the contrary, has always advertised it as the "Milton", "Milton Improved," "Webster Milton", "Webster Tri-Polar Oscillator" or the "Webster Magneto"; that since the month of

May, 1915, the plaintiff advertised to the trade that the 169 defendant Emil Podlesak was no longer connected with plaintiff, has cut the mark "Podlesak Patents" off its cuts and electro-types where said mark had previously been prominently displayed, and has caused the mark "Podlesak Patents" to be removed from the top part of the magnetos, where it had theretofore at all times been prominently displayed and could be readily seen, to an obscure place on the side, where it would not be noticed by a prospective purchaser unless searched for specially. Defendant denies that the use of the name "Podlesak" by said defendant corporations upon any product said defendant corporations are authorized lawfully to manufacture or sell under or or by virtue of the Splitdorf contract, was or is calculated to mislead or deceive, or would mislead or deceive intending purchasers into believing that the product of said defendant corporations is the product of said plaintiff, or that said "Splitdorf contract" can or is calculated to furnish said defendant corporations any ground or pretense to claim that said defendants have acquired any portion of the good will of the plaintiff in the name "Podlesak" or of the plaintiff's business; and denies that the effect of said Splitdorf contract is or is intended to be to enable said defendant corporations to appropriate any part of plaintiff's good will or of the public demand for plaintiff's said product.

27. And, in this behalf, defendant alleges, that the only right acquired by the plaintiff in or to the name "Podlesak" was and is to annex the surname of the inventors to the magnetos themselves in connection with the word "Patented", as provided in the contracts plaintiff's Exhibits C and D, pages 79 and 86 of plaintiff's bill of complaint, to which ref-

erence is hereby made. That neither he nor his brother Emil Podlesak have in any manner granted to plaintiff an exclusive right to the use of the name "Podlesak" in connection with plaintiff's business, or the field covered thereby, or any rights other or different from the right to affix said name to the devices specified in Exhibits C and D embodying the Podlesak inventions therein specified.

28. That, as this defendant is informed and verily believes, and claims and charges the fact to be, he never parted with his right to use the name "Podlesak" in connection with the manufacture and sale of the devices specified in the contracts Exhibits C and D, or in any business in which this defendant might thereafter engage in competition with the devices manufactured and sold by plaintiff under the contract Plaintiff's Exhibit C; and that he could lawfully sell the right to the use of his name in connection with his right to manufacture and sell under the contract Plaintiff's Exhibit D, or under any other inventions he has made not embodied in the contracts C, D and E, or might make and perfect.

29. Defendant denies that the reputation which plaintiff's product has acquired was built up by the plaintiff, and alleges the fact to be that the reputation of the Podlesak inventions was established by the defendants Podlesak long prior to the time they entered into business relations with plaintiff as aforesaid; and denies that plaintiff has expended any large sums of money in building up its business, and alleges that the large sums expended by plaintiff were in an attempt to perfect other magnetos and internal combustion devices than those covered by the Podlesak patents.

30. Defendant denies that he has aided, abetted or encouraged the defendant corporations directly or indirectly in any infringement or threatened infringement of the Podlesak patents or of plaintiff's rights thereunder, or in the alleged purpose of said defendant corporations unfairly to compete with plaintiff, and denies that he has in any manner threatened or, in the future, or otherwise, to aid, abet, encourage or assist said defendant corporations in any infringement of plaintiff's rights or in any unfair competition with plaintiff.

31. Defendant denies that the "Splitdorf" contract, Exhibit F, was or is a breach of any contract between defendant and plaintiff, or in violation of any rights of said plaintiff; denies that defendant is in any respect a trustee

for plaintiff; denies that said defendant corporations became successors in or under any trust whatever; and denying the creation or existence of the trust alleged, denies that this defendant has betrayed or proven unfaithful to any alleged trust, or that this defendant has betrayed any trust; and alleges that defendant has no knowledge of the remaining allegations of paragraph XXIV of said Bill of Complaint.

32. Defendant alleges that he is without knowledge of the allegations of fact contained in paragraphs XXV and XXVI; admits that Lynn A. Williams and Williams and Bradbury have handled plaintiff's patent business and litigation and were plaintiff's solicitors and counsel named in the Bill of Complaint signed by defendant in plaintiff's suit against the Sumter Electrical Company; and as to the remaining allegations of paragraph XXVII of said Bill of Complaint, this defendant is without knowledge.

33. Answering that portion of paragraph XXVIII which pertains to this defendant, defendant alleges that the contracts Exhibits C, D and E are plain in their terms in so far as plaintiff's duty to account for and pay the royalties therein prescribed is concerned, and in that behalf submits said contracts to the court. Defendant admits that the periods when accounts shall be rendered by the plaintiff are correctly stated in the Bill of Complaint; that there is an account now due for the quarterly period ending September 30, 1915, in which this defendant has an interest for that portion of said period expiring September 4, 1915. Defendant denies that it was or is a part of any fraudulent arrangement or conspiracy between the defendants Podlesak and the defendant corporations that the defendant companies shall examine plaintiff's books, directly or indirectly through the

172 Podlesaks or an agent or attorney designated by them; denies the existence of any arrangement, combination or conspiracy whatsoever; denies any intention or desire to make use of any information which may be contained in the royalty report in which the defendant is interested or to disclose any such information to any of the defendant corporations; denies that the plaintiff will be obliged to make default under said contracts; in this behalf, defendant states that he holds powers of attorney from each of the co-defendants, Splitdorf Electrical Company, Sumter Electrical Company and Emil Podlesak, duly executed and delivered by said co-defendants, under and by virtue of which this defendant

is authorized and empowered to receive from the plaintiff the royalties due to said defendants under agreements Exhibit C, Exhibit D and Exhibit E for the quarter ending September 30, 1915, and is also empowered to give to the plaintiff suitable and sufficient receipt therefor, which said powers of attorney defendant is ready and willing to exhibit to plaintiff upon its request; and as to the remaining allegations of said paragraph XXVIII this defendant alleges that he is without knowledge.

34. Answering paragraph XXIX, defendant denies that he has planned or has any intention, either alone or in connection with the defendant corporations, to defeat any litigation which may be instituted by plaintiff to protect its rights under the Podlesak patents; denies that he has any intention of preventing or attempting to prevent plaintiff from instituting or maintaining such litigation, admits that under the license contracts, Exhibits C & D plaintiff has the right to use the names of said Podlesaks, if so desired, in such litigation, so long as plaintiff is not in default under said contracts; and as to the remaining allegations of said paragraph XXIX, defendant alleges that he is without knowledge.

173 35. Answering paragraph XXX, defendant admits that plaintiff's business has not heretofore been profitable and has sustained considerable losses which have been made good from time to time to a large extent by plaintiff's stockholders; but denies that any such losses have been incurred in the development of plaintiff's business under said Podlesak patents. Admits that plaintiff's business has been more profitable during the present year; admits that a sum, not exceeding \$23,000, has heretofore been paid to the defendants Podlesak by way and on account of royalties under said license agreements; but denies that he has entered into any arrangement whatsoever with Emil Podlesak or with the defendant corporations to carry out any plans to ruin plaintiff's business; and denies specifically that he ever had any such idea in mind.

Further answering, defendant says that he is without knowledge as to the remaining allegations of paragraph XXX of said Bill of Complaint not hereinbefore specifically answered.

36. Further answering, defendant denies that he is prepared or ready to continue any alleged infringement of un-

fair competition against the plaintiff, the existence of which has heretofore been denied by this defendant, and which denial is here again repeated; and denies that said plaintiff will suffer any injury whatever at the hands of this defendant; and as to the remaining allegations of said paragraph XXXI, this defendant says he is without knowledge.

37. Defendant denies that in so far as this defendant is concerned, the plaintiff's remedy is only in equity, but, on the contrary alleges, that if said plaintiff has any cause of action against this defendant, its remedy is at law, and that no cause of action against this defendant, either at law or in equity, has been stated or alleged in said Bill of Complaint.

38. Answering paragraph XXXIV, this defendant denies that said plaintiff is entitled to the relief demanded against this defendant, or to any relief whatsoever, either at law 174 or in equity, against this defendant.

39. Further answering, this defendant denies each and all of the numerous conclusions of law set out in said Bill of Complaint which have not been specifically controverted herein.

40. And answering generally said Bill of Complaint, this defendant alleges that the contract Exhibit F, termed the "Splitdorf contract," was made between the defendant Podlesaks on the one hand and the defendant corporations on the other, in entire good faith and subject to the rights of the plaintiff under the license contracts, Exhibits C, D and E, set out in said Bill of Complaint; that in the making of said contract, this defendant sold out his rights under said patents to said defendant corporations, as he deemed and now deems he had and has a perfect right to do; that this defendant has not in any manner colluded, combined or conspired with the defendants, or any of them, or with any other person, firm or corporation whatsoever, to in any manner prejudice or injure the rights of the plaintiff, either under said Podlesak patents or under the license agreements between the Podlesaks and said plaintiff applicable thereto or otherwise; and in this connection, said defendant alleges that in all matters he has faithfully kept and performed all and singular the agreements between him and the plaintiff, existing and growing out of the relationship which existed between the parties, and has not in any manner used or attempted to use any knowledge which this defendant may have acquired of or concerning plaintiff's business.

41. As to the doings and things charged in said Bill of

Complaint against said Emil Podlesak, Splitdorf Electrical Company and Sumter Electrical Company, either individually or among themselves, this defendant is without knowledge.

42. And this defendant, having answered to the said Bill of Complaint in so far as he is advised the same is material or necessary to be answered unto, denies that the plaintiff is entitled to the relief or any part thereof in the Bill of Complaint prayed for, or to any relief whatsoever, and prays the same advantage of his aforesaid answer as if he had set up by motion the several matters and things aforesaid where a motion would have been proper, all of which matters and things this defendant is ready and willing to aver, maintain and prove as this Honorable Court may direct and prays to be hence dismissed with his reasonable costs and charges in this behalf most wrongfully sustained.

HENRY J. PODLESAK

In His Own Proper Person.

Of Counsel

State of Illinois }
County of Cook } ss.

HENRY JOSEPH PODLESAK, being first duly sworn, on oath deposes and says that he is the defendant of that name mentioned in the Bill of Complaint and in his answer in the foregoing entitled action; that he has read the above and foregoing answer signed and subscribed by him and knows the contents thereof, and that the same is true of his own knowledge, excepting the matters therein stated of his information and belief, and as to those matters he believes it to be true.

HENRY J. PODLESAK

Subscribed and sworn to before me this day of December, A. D. 1915.

ELLEN H. CLEGG

Notary Public, Cook County, Illinois

SEPARATE ANSWER OF DEFENDANT TESLA EMIL F
PODLESAK.

(Filed December 14, 1915)

To the Honorable, the Judges of the District Court of the
United States for the Northern District of Illinois, Eastern
Division:—

I.

The defendant Tesla Emil Podlesak, appearing specially and for the sole purpose of objecting to the jurisdiction of the court over his person in this action, for his separate answer to that portion of the bill of complaint as amended, filed by the plaintiff in the above entitled action, relating to the citizenship of the parties to this action, admits, denies and alleges as follows:

Said defendant admits that the plaintiff was and is a corporation chartered and existing under and by virtue of the laws of the State of West Virginia, and has its principal place of business at Racine in the County of Racine, State of Wisconsin; and in this behalf defendant alleges that, as he is informed and verily believes, said plaintiff was chartered under the laws of West Virginia as a non-resident corporation; that as this defendant is informed and verily believes, said plaintiff had not at the time this action was instituted, and has not now, any office or place of business in the State of West Virginia, and has never maintained any office or place of business in said state; that none of plaintiff's officers or directors ever resided or now reside in said 177 state; and that said plaintiff's true and only legal residence and habitation is in the City and County of Racine in the State of Wisconsin, under the laws of which state it has, as this defendant is informed and verily believes, qualified to engage in business, and not in the State of West Virginia. This defendant admits that the defendant Henry Joseph Podlesak was at the time of the commencement of this action, and now is, a citizen, resident and inhabitant of the Northern District of Illinois, and on information and belief defendant admits that the residence and citizenship of the defendants Sumter Electrical Company and Splitdorf Electrical Company are in the States of South Carolina and New Jersey as stated in said bill.

Defendant admits and alleges that since the 26th day of

May, A. D. 1913, this defendant has been, and was at the time of the commencement of this action, and now is, a citizen of the State of Wisconsin and a resident and inhabitant of the City of Racine, Racine County, in the Eastern District of Wisconsin; and that this answering defendant never has been, and is not now, a citizen, resident or inhabitant of the State of Illinois or of the Northern District of said State.

Defendant denies that at any time prior to, at, or subsequent to the commencement of this action, he had any regular and established place of business at Chicago, Illinois, or within the Northern District of Illinois, or within the Eastern Division of said District, or anywhere within said State of Illinois, or any agent or agents conducting any regular and established business in said State or District; and, in this behalf, defendant alleges that at all times subsequent to May 26th, 1913, this defendant's sole and only place of business has been, and was at the time of the commencement of this action, and now is, at 1322 Thurston Avenue in the City of Racine, Racine County, Wisconsin; and denies that he has

committed, or contributed to, any acts of infringement of
178 plaintiff's patents or any of them, or of any patents in which said plaintiff has or claims any interest, within said division or district, or elsewhere.

As to whether the defendants Sumter Electrical Company and Splitdorf Electrical Company, or either of them, have any regularly established places for doing business and duly appointed agents or officers located in the City of Chicago, State of Illinois, in this division and district, or elsewhere in said State, this defendant is without knowledge.

Defendant further alleges that on the 12th day of October, A. D. 1915, defendant was casually at the City of Chicago for the business hours of that day only, on business not in any manner connected with the subject matter of this action or with any of the parties thereto; and that while at said city and while he was preparing to return to his home at the City of Racine in said State of Wisconsin he was served with the subpoena in this action, and has not in any manner consented to the jurisdiction of the court over his person, and does now claim and contend that this Honorable Court has never acquired, and is now without jurisdiction over the person of this defendant, and that this action should be dismissed as to him for want of jurisdiction over the person of this defendant; and moves the court, that because of the

matter hereinbefore alleged and set forth, said action be dismissed as to him, and that he be permitted to go hence without delay.

That, if said bill of complaint, or all or any parts thereof relating to matters other than the alleged infringement of the Podlesak patents therein charged, be dismissed as to the defendant corporations, this defendant alleges that said action or the part thereof so dismissed ought not to proceed against this defendant, for the reason and because each said defendant corporations are indispensable parties, without whose presence the rights of all persons interested under the Contracts, Exhibits C, D and E of the bill of complaint, could not be finally determined by the court; and this defendant moves that he be dismissed for that reason, to the extent the bill against the defendant corporations is or may be dismissed.

II.

And without waiving the claim of this defendant that this Honorable Court is without jurisdiction over the person of this defendant, and in event that the Court shall have denied defendant's motion to dismiss said action as to him upon that ground, the defendant Tesla Emil Podlesak, saving and reserving his exception to such denial, alleges, and now here moves this Honorable Court that this action be dismissed as to him and that he be permitted to go hence without delay, for the reason that said bill, as amended, does not state facts sufficient to constitute a cause of action in favor of the plaintiff against this answering defendant, and is insufficient in point of fact to warrant the relief prayed for and to warrant any relief in plaintiff's behalf against this defendant, in that:—

(a) Because the facts and circumstances alleged in the Bill of Complaint concerning the relationship between T. Emil Podlesak in virtue of his employment by the plaintiff company did not, by reason thereof, vest any right, title or interest in the patents referred to in the Bill of Complaint.

(b) Because the facts and circumstances set forth in the Bill of Complaint by virtue of which it is claimed that the plaintiff acquired some right or title apart or outside the contracts made a part of the bill, do not confer upon the plaintiff any more, if any right or interest than a mere shop right or a license, and the bill of complaint does not set

180 forth any grounds upon which to find that the title became vested in the plaintiff by reason thereof.

(c) That it appears affirmatively upon the face of said bill of complaint that the plaintiff has, for a valuable consideration, under the contracts of February 5th, 1914, and January 20, 1915, Exhibits C, D and E of plaintiff's bill of complaint, waived and relinquished any rights the plaintiff might have had, or that plaintiff now claims to have, in the inventions of the defendant Tesla Emil Podlesak and the patents secured by and in the name of this defendant therefor, and that said plaintiff is estopped and precluded and should be held estopped and precluded, from now making any such claim by and under said contracts, and by and under its allegations set forth in paragraphs of subdivisions IV, V, VI, XIV, XV, XVII, XXVIII, and on page 62 of plaintiff's bill of complaint, wherein it has conclusively elected to abide by each said contracts, Plaintiff's Exhibits C, D and E; and said bill of complaint does not state any facts or circumstances wherefrom it may be inferred and held that the Webster Electric Company was forced to enter into said contracts by reason of any fraud or legal duress.

(d) That said plaintiff having agreed with defendants Podlesak that the contracts Exhibit C (See Bill, p. 82), Exhibit D (See Bill, p. 90), and Exhibit E (See Bill, p. 94), were and are assignable, and said plaintiff not having at any time prior to the commencement of this action made any claim that said contracts were not assignable, but on the contrary, said plaintiff having stood by and permitted said contracts to be and remain as originally written, and waited until after the Podlesaks had executed and delivered to the defendant corporations the assignment and contract Plaintiff's Exhibit F (See Bill, p. 95), should be held and adjudged guilty of such gross and inexcusable negligence, laches and delay, to the injury of this defendant, as to estop and preclude said plaintiff from now claiming other or different rights than have been granted it by the defendants Podlesak by and under said contracts, Exhibits, C, D and E.

(e) That said plaintiff having agreed with this defendant under the contract Plaintiff's Exhibit D that the defendants Podlesak expressly reserved (See Bill, p. 85) the right to themselves to make, use and see the inventions mentioned in said contract Exhibit D (See Bill, p. 83); and having further agreed (See Bill, p. 90) that said contract shall extend to and

be binding upon the heirs, assigns and legal representatives of the parties of the first part therein, the defendants Podlesak,—plaintiff should be held and adjudged estopped and precluded from in any manner questioning the assignment by this defendant of his right, title and interest in said contracts Exhibits C, D and E, and in the patents therein mentioned.

(f) Because the facts and circumstances alleged in the bill are not sufficient to establish any trust relation between the plaintiff and any of the defendants, for the reason that all the transactions stated as a foundation for the trust relations claimed, occurred at a time previous to the time of entering into the written agreements between the plaintiff and the Podlesaks mentioned in the Bill of Complaint, and all such relations, if any there were, became abandoned, and all such claims were waived by plaintiff when it made and entered into the said agreements in writing.

(g) That said bill of complaint, as amended, does not state facts sufficient to constitute a cause of action in favor of plaintiff against the defendant Tesla Emil Podlesak, and is insufficient in point of fact to warrant the relief prayed for, or any relief in plaintiff's behalf upon any causes of action for infringement of the patents therein charged to have been infringed, or the alleged contribution by this defendant 182 to the infringement of the patents mentioned in said bill of complaint, since under the contract Exhibit D of said bill of complaint the defendants Podlesak had the right to manufacture and sell the devices embodying the inventions the patents on which are charged to have been infringed.

III.

Defendant alleges that if said bill states any cause of action against him, there is a misjoinder of causes of action in the bill of complaint herein, because the complaint alleges several causes of action, but the said several alleged causes of action are not joint, and the same liability is not asserted against all of the material defendants, and sufficient grounds do not appear for uniting the causes of action in order to promote the convenient administration of justice, in that:

(a) The complaint charges infringement on the part of the corporation defendants, by making, using and selling and importing into the Northern District of Illinois, Eastern Division, apparatus described and claimed in the Podlesak patents charged to be infringed in suit, and asserts liability against

said defendants by reason thereof, but states no facts or circumstances showing such acts of infringement on the part of the Podlesaks and asserts no liability against them.

(b) The complaint charges the said Podlesaks, defendants, with certain delays, breaches of contract, deceitful, wrongful and fraudulent actions, both individually and in co-operation and connivance with each other, in respect to their patents, inventions and applications for patents, prior to any alleged agreement or connection of said corporation defendants, with said Podlesaks, and asserts liability against said Podlesaks therefor, but sets forth no facts or circumstances to connect the said Electrical Companies, defendants, with the said wrongful acts on the part of the Podlesaks, and 183 asserts no liability therefor against said defendant corporations.

(c) The complaint charges unfair competition in trade on the part of the corporation defendants, particularly, in the use of the word Podlesak in connection with the manufacture and sale of apparatus, and asserts liability against the said defendants therefor, but makes no charges supported by allegations of fact against the said Podlesaks, and asserts no liability against them in that regard.

(d) The complaint charges interference with litigation on the part of the corporation defendants, and asserts liability against them therefor, but makes no similar charges supported by allegations of fact against the Podlesaks, in respect of infringers other than the Electrical Companies, defendants, and asserts no liability therefor against the Podlesaks.

(e) The complaint alleges divers other several causes of action and asserts liability thereon against the said Podlesaks or either of them, and against the said defendant corporations or either of them, but does not allege any joint cause of action, supported by allegations of fact, excepting, that the bill charges conspiracy in that the Podlesaks, defendants, sold, and the Electrical Companies, defendants, purchased, for a valuable consideration, the Podlesak patents, subject to the existing contracts mentioned in the bill of complaint; and this defendant is advised by counsel, and so avers, that such charge is not sufficient to support the joinder of all the other dissimilar and separate causes of action without joint liability, which are hereinbefore set forth, and does not constitute sufficient ground for uniting the said several causes of action in order to promote the convenient administration of justice,

particularly, because the various acts complained of are not related as parts of one general transaction, nor did the 184 several alleged causes of action arise out of one general transaction, nor is there a common fact or set of facts or circumstances upon which the several unrelated causes of action depend, nor is there alleged in the bill any common ground for relief against the several defendants and in respect of the several causes of action set forth.

IV.

Defendant alleges further that there is a misjoinder of parties in the bill of complaint, herein, there being several defendants, but there not being a joint interest among all of the defendants in the several subjects of the action, in that:

(a) Neither of the defendants, the said Electrical Companies, has any unity of interest or defense with either or both of the said Podlesak Brothers, co-defendants, in respect to any sum or sums of money alleged in the bill to have been paid to the said Podlesaks by the plaintiff prior to the execution of the Splitdorf contract.

(b) Neither one nor both of the said Podlesaks have any unity of interest with either or both of the said Electrical Companies, co-defendants, in the unlawful competition alleged in the bill of complaint, as it does not appear in the said bill of complaint that either of the said Podlesaks is engaged in making, using or selling apparatus in infringement of the plaintiff's rights or any ignition apparatus whatsoever.

(c) Neither of the defendants, the said Podlesaks, has any unity of interest with either or both of the Electrical Companies, co-defendants, in any interference with litigation by said Electrical Companies, as alleged in the bill.

(d) Neither of the corporation defendants has any unity of interest with either of the said Podlesaks, co-defendants, in respect to acts alleged in the bill to have been 185 done by one or both of the said Podlesaks, individually, or in connivance with each other, before the date of any connection or agreement alleged in the bill between said Electrical Companies and the said Podlesaks.

And for all and singular the reasons hereinabove set forth, defendant says that the bill of complaint should be dismissed.

V.

And without in any manner waiving the contention that this Honorable Court is without jurisdiction over the person of the defendant Tesla Emil Podlesak, and saving and reserving his exception to any order denying this defendant's motion to dismiss said action as to him on the grounds aforesaid and each of them, said defendant, answering that part of said bill of complaint which pertains to him, admits, denies and alleges as follows:

1. This defendant admits the allegations of subdivision I of said bill of complaint, excepting only that allegation as to the date of patent for current generator and igniter for internal combustion engines No. 1,055,076, which patent defendant alleges was granted to him on the fourth day of March, A. D. 1913, instead of March 14, 1913, as alleged in said bill of complaint.

2. Answering subdivision II, defendant admits the making and executing of the contract dated November 2, 1908, a true copy of which is annexed to the bill of complaint, marked Exhibit A; and denies the allegations of said complaint as to the legal effect of said instrument; and denies that it contains any matter, or purports to be anything different, than what appears upon the face thereof, and in further answer submits said contract Exhibit A to the court.

Defendant admits that on or about March 25, 1909, the 186 Hertz Electric Company was incorporated under the laws of the State of West Virginia; but in that behalf defendant alleges that said Hertz Electric Company was, as defendant is informed and verily believes, organized under the laws of said State as a nonresident corporation; and that at said time said plaintiff had its principal office and place of business at the City of Tiffin, in the State of Ohio, and that it did not then, and has at no time since maintained any office or place of business in said State of West Virginia, and that none of its officers or directors have ever resided in said State.

Defendant admits that the Webster Manufacturing Company, on or about March 26th, 1909, transferred its rights under said contract of November 2, 1908, Exhibit A of the bill of complaint, to the Hertz Electric Company; and that thereafter, and on or about July 22, 1909, the corporate name of said Hertz Electric Company was changed to Webster Electric Company.

And in this behalf, defendant alleges that said contract,

Exhibit A, was, on or about the 30th day of March, A. D. 1912, and thereafter, canceled, terminated and annulled by this defendant and the defendant Henry Joseph Podlesak, because of the failure of the plaintiff Webster Electric Company, the assignee of the license therein named, to pay the royalties provided in said contract and to otherwise comply with the covenants, terms and conditions thereof on its part; that said termination and cancellation was fully agreed to and acquiesced in by the plaintiff; that after said contract was annulled and terminated, the defendants Podlesak, at said plaintiff's special instance and request, from time to time gave special permits to the plaintiff to manufacture and sell certain of the devices in said contract described to fill specific orders which said Webster Electric Company had at the time each such special permit was granted, and not otherwise: 187 and alleges further that after the termination of said contract, said Webster Electric Company retained no right, title or interest thereunder, and had no right, title or interest in the inventions and patents described in said contract, except the bare right granted from time to time, in each case at plaintiff's special request, to manufacture and sell certain of said inventions, for the sole purpose of filling orders secured by said plaintiff at different times and on hand when each special permit was granted; that because of the premises, said contract, Exhibit A, ceased to be effective for any purpose after March 30th, 1912, and that said plaintiff had no rights thereunder.

3. Answering subdivision III, this defendant admits the making and execution of the contract of assignment and transfer between the defendants of Podlesak, Exhibit B; and alleges that plaintiff was advised and knew of said assignment and transfer at the time it was made.

4. Answering subdivisions IV, V and VI, admits the execution of the contracts of the fifth day of February, 1914, set out as Plaintiff's Exhibits C and D of said bill of complaint; and admits that the contracts Exhibits C and D are parts of one and the same transaction; and admits the execution, on the 20th day of January, 1915, of a certain other contract termed supplemental agreement, a true copy of which is set out as Plaintiff's Exhibit E of said bill of complaint; and in connection with said Plaintiff's Exhibits B, C, D and E, this defendant denies that said contracts grant plaintiff any rights or contain anything other than as stated on the face of each

said contracts, or that the legal effect of said contracts is any different from what said contracts on their face purport to be; and in so far as the allegations of subdivision IV, V and VI are inconsistent therewith defendant denies the same, and in support of such denial, exhibits said contracts to the court.

188 5. Answering the VIIth subdivision of said complaint, defendant admits that plaintiff was and is authorized to manufacture and sell electric generators and ignition devices for internal combustion engines and that it has been engaged in said business. Defendant denies that the Webster Manufacturing Company was the predecessor of the plaintiff, but admits that said Webster Manufacturing Company was, prior to the organization of the plaintiff, engaged in attempting to develop and put upon the market electric generators and ignition devices embodying the Milton and McInnerney patents.

Defendant alleges that he has no knowledge as to the amount expended by plaintiff in building up its business, and alleges that, as this defendant is informed and verily believes, the greater part of the expenditures made by the plaintiff were made in an attempt to develop and perfect an ignition device for automobile engines, and the Milton and McInnerney devices mentioned, and was not expended in reliance upon the inventions of the Podlesaks, which said inventions mentioned and described in Plaintiff's Exhibit A were perfected and workable prior to and at the time the contract Exhibit A aforesaid was entered into between the Podlesak Brothers and the Webster Manufacturing Company; and denies that the expenditures made by said plaintiff were based wholly and entirely or in any large degree upon the electric generators and ignition devices embodying the Podlesaks' inventions.

6. Answering subdivision VIII of said bill of complaint, defendant admits that he was employed by plaintiff on August 10, 1909, at a salary of \$125 per month; and alleges that said employment was under and pursuant to one certain contract in writing of that date, made and entered into between plaintiff and defendant, a true copy of which is hereto annexed, marked Defendant's Exhibit 1, and made a part hereof. Defendant admits that under said contract he agreed
189 to experiment and endeavor to perfect an attachment to attach the magneto, then being manufactured by plaintiff under the Milton and McInnerney patents, to gasoline engines, as in said contract provided; but specifically denies that it was any part of his duty under said contract, or under

his employment, to do any experimental or development work on the magneto and ignition devices covered by the Podlesak inventions mentioned in Exhibit A of plaintiff's bill of complaint; and denies that he represented himself to be efficient in the perfection of improvements or inventions to be used in connection with the generators manufactured, sold and dealt in, or to be manufactured, sold and dealt in by plaintiff.

Defendant alleges that the history and facts of defendant's employment under said contract are as follows:—

Between August 10 and September 8, 1909, he moved to Chicago and was at plaintiff's Chicago office and factory at Chicago.

On September 8, 1909, he went to Tiffin, Ohio, and assisted in the organization of plaintiff's factory which was then being located at that point for the purpose of manufacturing an automobile engine magneto which plaintiff was endeavoring to perfect under the Milton patents, to enable plaintiff to fill a contract for ten thousand automobile engine magnetos; that the organization of said factory and the work defendant put on said automobile magneto and the Milton magneto for stationary engines occupied the months of September, October, November and part of December, 1909; that during December, 1909, defendant went to Chicago and entered the sales department of plaintiff's business; that in January, 1910, he went on the road, traveling from the Chicago office as his headquarters, in plaintiff's interest; and spent most of that month traveling as a salesman and in visiting purchasers of magnetos, and attempting to make said devices in the hands of

said purchasers work in actual practice; that February, 190 1910, was spent in plaintiff's Chicago office or at the

Automobile Show, where plaintiff had an exhibit; that other parts of February and March, 1910, were spent on the road in plaintiff's interest as aforesaid; that plaintiff having failed to make a success of said Milton automobile magneto upon which it had devoted practically its entire time and energies to the neglect of its line of magnetos for stationary engines, abandoned said device along in March, 1910; that on or about April 1, 1910, defendant requested of plaintiff that he be relieved of further services under said contract; that thereafter and about April, 1910, defendant, at plaintiff's solicitation, went back to plaintiff's factory at Tiffin, Ohio, under a special arrangement, to endeavor to invent and perfect an automobile engine magneto that would work; and spent his time in that behalf at said factory, or on special trips on the road in plaintiff's interest; that on May 10, 1910, the contract

Defendant's Exhibit 1 was finally and in all respects terminated, and thereafter ceased to be in force or effect for any purpose. That during the period of his employment under said contract Exhibit 1, defendant was unable to invent, and did not invent, any new and useful improvements whatever; and that all work and experiments done and performed by said defendant during his employment under said contract were in fact turned over to and left with plaintiff.

Defendant denies that his salary was increased to \$150 per month under the employment mentioned in subdivision VIII of said complaint, and on the contrary alleges, that after the termination of the contract Defendant's Exhibit 1 on May 10, 1910, as aforesaid, a new contract was made and entered into in writing between plaintiff and defendant, May 18, 1910, for the term and period of one year, at a salary of \$1800, payable in monthly installments of \$150 each; that a true copy of said contract is hereto annexed, marked Defendant's Exhibit 2, and made a part of said answer.

That pursuant to said contract Defendant's Exhibit 2, 191 and not otherwise, defendant moved his family to Tiffin,

Ohio, and entered plaintiff's employ at its factory there located, in the capacity and under the terms and conditions in and by said contract prescribed. That during the months of June, July, August, September and part of October, 1910, plaintiff, still persisting in its attempt to devise and perfect a magneto for use on automobile gasoline engines, to the neglect and exclusion of its regular line of magnetos for stationary gas and gasoline engines, as the fact is, required that defendant devote all his spare time which his other duties to plaintiff permitted, in an attempt to perfect such device; and that, during said period, defendant was unable to give and did not give any time or attention to the development or improvement of any other style or type of magneto whatever; and further alleges that during said period he did not conceive of, invent, perfect, or reduce to practice any new improvements in or pertaining to magnetos whatsoever.

That, in the latter part of October, 1910, plaintiff, having abandoned its attempt to devise and perfect an automobile magneto, set defendant at work in the matter of the manufacture of the magneto and ignition devices manufactured by plaintiff under the Podlesak inventions mentioned in Exhibit A of plaintiff's complaint, and defendant, in that behalf, set about endeavoring to improve said magneto and ignition apparatus in actual practice so as to render it fit for practical use.

7. Answering the allegations of paragraphs or subdivisions IX, XI and XII of said bill of complaint relating to the inventions of this defendant, defendant, admits that as a part of his general plan of improvement and development of the magneto which plaintiff was getting in condition to manufacture under the Podlesak patents, this defendant during the months of November and December, 1910, conceived certain improvements which were afterwards and during the years 1911 and 1912 in their details reduced to practice, and 192 upon which the following applications, among others not here in controversy, were made, and patents granted to this defendant, that is to say:—

Application Serial Number 639,738, filed July 21, 1911, for magneto machine involving magneto details and structure, upon which was granted Letters Patent No. 1,098,052, May 26, 1914; and Application Serial Number 668,153, filed December 27, 1911, on an Inductor Alternator, involving details of magneto structure, upon which was granted Letters Patent No. 1,098,754, June 2, 1914, which was a division of application Serial No. 639,738.

Application Serial Number 690,921, filed April 15, 1912, for spark plug and bracket combined, upon which was granted Letters Patent No. 1,055,076, March 4, 1913.

Application Serial Number 734,143, filed November 29, 1912, for a starting lever, upon which was granted Letters Patent No. 1,101,956, June 30, 1914.

Defendant admits that said inventions were worked out partly on plaintiff's time and partly on defendant's time, and denies that they were conceived or worked out on plaintiff's time exclusively; admits that said inventions were reduced to practice during the years 1911 and 1912, and alleges that such reduction to practice was for the primary purpose of enabling plaintiff to determine whether said improvements should be incorporated into plaintiff's product as provided in the contract Defendant's Exhibit 2 under the Podlesak patents.

Concerning defendant's invention of July 21, 1911, evidenced by Application Serial No. 639,738, and by Letters Patent No. 1,098,052, defendant denies that plaintiff ever agreed to pay, or in fact paid the expense of the preparation and filing of said application, or the prosecution thereof, and the securing of said patent, or any part of said expenses; admits that said application was prosecuted by attorneys who represented plaintiff in its patent matters and business; and denies

that the attorneys who prosecuted said application were
193 plaintiff's attorneys in that behalf, and alleges that all
said expenses were paid by this defendant out of his own
means, and with plaintiff's full knowledge at the time, as will
hereafter appear.

Answering as to divisional applications Serial Number 868,-
153, filed December 27, 1911, on which were granted Letters
Patent No. 1,098,754, June 2, 1914, Application Serial Num-
ber 690,921, filed April 15, 1912, on which were granted Let-
ters Patent No. 1,055,076, May 4, 1913, and Application Serial
Number 734,143, filed November 29, 1912, on which was
granted Letters Patent No. 1,101,956, June 30, 1914, defend-
ant specifically denies that he delayed or postponed making,
or failed to file applications on said inventions, or any other
inventions made by him during the period covered by his em-
ployment with plaintiff; and denies, that said, or any other ap-
plications for patent were prosecuted secretly, or surrepti-
tiously, or without the knowledge or consent of plaintiff, or
contrary to the terms, letter or spirit of any contract, agree-
ment or understanding whatsoever between plaintiff and this
defendant; admits that said three applications were prose-
cuted by attorneys other than plaintiff's attorneys; denies
that plaintiff did not discover the facts until long after, or at
any time after, said applications were made; and denying all
allegations of fraud and wrongdoing in the premises, defend-
ant denies that this defendant in any manner co-operated or
connived with the defendant Henry Joseph Podlesak fraudu-
lently to make applications for United States patents; denies
that said applications for patents or any of them were prose-
cuted by defendant Henry Joseph Podlesak.

8. Further answering, defendant alleges that at all times
while at plaintiff's factory, his place of work and the experi-
mental department, so called, was in the same room as plain-
tiff's general office; that defendant and his work was un-
194 der the constant supervision and observation of plain-
tiff's managing officers and employees; that he reported
all progress as it was made, and fully disclosed to plaintiff's
managing officers all his discoveries, improvements and in-
ventions as soon as they were made. And, in connection with
the patents which plaintiff now claims by virtue of defend-
ant's employment, defendant alleges that the right to manu-
facture and sell under said inventions was offered to plain-
tiff by defendant from time to time when made, and thereafter
kept good at all times; that defendant, being then under the
impression that the contract Defendant's Exhibit 2 required

plaintiff to pay the expenses of patenting said inventions, requested plaintiff to defray the expenses of securing patents thereon; that after considerable work was done in plaintiff's shop thereon, plaintiff refused to assume or pay any of the expenses of securing Letters Patent, or to have anything to do therewith; that, after such refusal, this defendant, having been advised that plaintiff was not obligated to pay such expense, with plaintiff's full knowledge, and to the end that his valuable property rights therein be preserved, took said inventions to Brown & Williams, attorneys who then represented plaintiff in patent matters, and was advised by said attorneys that the only part patentable was that embodied in Application Serial No. 639,738, filed July 27, 1911, and that the remainder was not patentable, in the opinion of said attorneys; that thereupon defendant directed Brown & Williams to secure if possible said patent, and thereafter, with plaintiff's full knowledge, took the remainder of said invention to another attorney, who prosecuted the applications thereon, which were filed in 1911 and 1912, and finally secured Letters Patent No. 1,098,754, under date of June 2, 1914, on an Inductor Alternator; No. 1,055,076, dated March 4, 1913, on a spark plug and bracket; and No. 1,101,956, dated June 30, 1913, on a starting lever; that defendant paid out of his own funds all the expenses of the preparation of applications, 195 the prosecution and the securing of said patents, as he had the right to do under his then existing contract with plaintiff, Defendant's Exhibit 2.

Defendant further alleges, that throughout all said period during which the above and foregoing improvements and applications for patents were made, said contract Defendant's Exhibit 2 was, and remained, in full force and effect, and without any change whatever in so far as any rights claimed by plaintiff in defendant's inventions made during that period are concerned, up to the third day of March, 1913, when the contract, a true copy of which is hereto annexed, marked Defendant's Exhibit 3, and made a part hereof, was made and entered into, and under which defendant continued in plaintiff's employ until his discharge by plaintiff May 14, 1915.

Referring back again to subdivision VIII of said bill of complaint, defendant admits that during his employment with plaintiff he acquired a general knowledge of plaintiff's business; admits that in the course of his work he used whatever tools or testing apparatus plaintiff furnished for that purpose; denies that his employment was in any respect confidential in character; denies that plaintiff had any plans or

secrets whatever, or that plaintiff divulged to defendant any knowledge whatever that was not open and known generally to the employees of plaintiff who might care to take the trouble of finding out any facts relating thereto; and denies that he ever proved unfaithful to, or abused, any trust or confidence reposed in him whatever.

Defendant denies that he was appointed factory superintendent May 18, 1910, and alleges that he was not so appointed, and did not assume the duties of that position, until January 1, 1912. Defendant admits that shortly after May 18, 1910, he was placed in plaintiff's experimental department as a draftsman and experimenter; that on or about January 1, 1912, he was made plaintiff's factory superintendent; 196 that in March, 1912, he was elected a director and secretary of plaintiff corporation, and on March 3, 1913, he was given general charge of the manufacturing, experimental and production departments of plaintiff's business under the supervision and control of the plaintiff's board of directors, pursuant to the contract of that date, Defendant's Exhibit 3 hereof, to which reference is hereby made, and not otherwise; and that his salary was fixed as provided in said contract.

9. Further answering plaintiff's claim of and to rights in defendant's inventions other, greater or different than the rights expressly granted by defendant to plaintiff; and, in answer to the allegations of said complaint, wherever said allegations may appear therein, to the effect that plaintiff was or is entitled to any such other, greater or different rights because of defendant's employment, defendant denies that he ever hired out to, or was employed by, plaintiff as an inventor or experimenter, or superintendent, or secretary, or director, or in any other capacity whatsoever in the sense that plaintiff became by virtue of such employment or relationship entitled to the ownership of, or any rights in, defendant's inventions other, greater or different than have heretofore been granted by and under the contract Defendant's Exhibit 2, on performance by plaintiff of the conditions therein prescribed; and defendant denies that there ever existed any understanding or agreement whatsoever with plaintiff which conferred any rights on plaintiff in said inventions, or any of them, by virtue of or arising out of defendant's employment in any capacity whatsoever; denies that said inventions, or any of them, were made as part of this defendant's duty, or for plaintiff's benefit; denies that said inventions, or any of them or the patents granted thereon belonged, or now belong to

plaintiff, or that plaintiff was or is entitled to any rights other than the right to manufacture and sell devices embodying such inventions under royalty, as prescribed in the contract, 197 Defendant's Exhibit 2; denies that said inventions or any of them were ever incorporated into plaintiff's product otherwise than pursuant to and by virtue of the contract Defendant's Exhibit 2, and special licenses and permits granted at plaintiff's request, by this defendant, and later by the defendants Podlesak, after defendant's brother had acquired the interests in this defendant's inventions set forth in the contract Exhibit B of plaintiff's complaint.

Answering the various allegations in subdivisions X to XIV, inclusive, with reference to the defendant Henry Joseph Podlesak:

Defendant admits that he defendant Henry Joseph Podlesak is a brother of this defendant and is a registered patent attorney; but in this behalf alleges that said Henry Joseph Podlesak is not an attorney at law or learned in the law, and is not a member of the bar of this or of any other court, and has never been licensed to practice law in this or any other state or district. Defendant admits that Henry Joseph Podlesak knew that this defendant had made the inventions described in said bill of complaint and in Plaintiff's Exhibit B to said bill, assisted in the preparation of applications for patents thereon, and knew that this defendant worked for plaintiff; and denying that either defendant Podlesak has done anything wrong, denies that said Henry Joseph Podlesak has been familiar or is now familiar with any other transactions and doings of this defendant described in said bill of complaint; and denies that said Henry Joseph Podlesak has sided, assisted or co-operated with this defendant in any transportations or doings charged against him as wrongful in said complaint.

10. Answering subdivision XIII of said bill of complaint, defendant admits that the invention described and claimed in Letters Patent No. 1,022,642, which was granted April 9, 1912, to the defendant Henry Joseph Podlesak, and not to this answering defendant, is not in and of itself an electric generator, but is capable of use in connection with 198 and as a part of electric generators and ignition devices such as were sold and dealt in by plaintiff; denies that said invention is of utility only when incorporated in or used in connection with or as a part of electric generators and ignition devices, and alleges the truth to be that said invention is of utility and is very extensively used in connection with

sparkling mechanism and ignition devices entirely different in principle from those manufactured and sold by said plaintiff, and that said invention constitutes a separate article of sale, and is of utility generally in the matter of producing the spark necessary to ignite the gas in an internal combustion engine.

Defendant admits that the defendant Henry Joseph Podlesak, after the patent to him therefor had been granted, and not otherwise, imparted to this defendant knowledge of said invention; denies that he arranged or agreed with said Henry Joseph Podlesak to incorporate said invention into the electric generators and ignition devices sold by the plaintiff; denies that plaintiff is the owner of, or has any exclusive right or title in said patent or in the invention disclosed thereby. Defendant alleges that as soon as this defendant learned of the invention, he called the attention of the plaintiff thereto and advised that plaintiff arrange with said Henry Joseph Podlesak for the right to use his invention; and that thereafter said invention was from time to time, pursuant to special permits granted, incorporated in the ignition devices manufactured by the plaintiff, beginning with the month of September, 1912, at plaintiff's special instance and request, with plaintiff's full knowledge and consent, and as defendant verily believes at the time, with the knowledge and consent to said Henry Joseph Podlesak, and not otherwise; and that said invention was not used by plaintiff until more than six months after the patent therefor had been granted 199 to said Henry Joseph Podlesak.

Answering that portion of said XIIIth subdivision set out on page 21 of said bill of complaint, defendant, on information and belief, admits that during the month of April, 1912, the defendant Henry Joseph Podlesak brought to the attention of plaintiff the fact that applications for Letters Patent Serial No. 639,738, dated July 21, 1911, No. 668,153, dated December 27, 1911, and Serial No. 690,921, dated April 15, 1912, had been made, and alleges that plaintiff previously thereto had acquired from this defendant full knowledge of all said inventions and applications; denies that said Henry Joseph Podlesak called plaintiff's attention at that time to application Serial No. 734,143, dated November 29, 1912, and alleges that said plaintiff previously had acquired from this defendant Emil full knowledge of said invention and application; denies that any of said inventions had at that time been incorporated in plaintiff's product, or at any other time except in pursuance of express license from the Podlesaks;

admits and alleges that said Henry Joseph Podlesak advised plaintiff at that time that the license contract, Plaintiff's Exhibit A, had been terminated and canceled and that plaintiff had no right to manufacture thereunder devices involving any of the therein-mentioned Podlesak patents; admits that said Henry Joseph Podlesak informed and advised plaintiff that if it insisted upon manufacturing, and manufactured, the devices embraced in the said Podlesak patents without authority, it would be infringing said Podlesak patents, and that if it incorporated therein the invention described in Letters Patent No. 1,022,642, without permission, it would infringe said patent; and in this behalf defendant alleges that said statements were true in point of fact when made, but were made pending negotiations for a license and permit from the defendants Podlesak to the plaintiff to continue the manufacture of said magnetos and accessories covered by said Podlesak patents.

11. Answering subdivision XIV of said bill of complaint, defendant denies that the invention covered by Letters Patent 1,022,642, was so combined and used in plaintiff's product that it could not be segregated without injury to plaintiff's business, and alleges the truth to be that said device could be segregated therefrom without in any manner impairing the utility of the magneto manufactured by said plaintiff; and denies that this defendant took any advantage whatever of the situation alleged and claimed to exist in subdivision XIV of said complaint, or any advantage whatever of plaintiff; admits that after the contract Exhibit A was terminated, Henry Joseph Podlesak advised plaintiff it was or would be, if it continued to manufacture under the Podlesak patents, infringing the same; admits that plaintiff, after the termination of the contract Exhibit A, was repeatedly requested either to enter into a license agreement embodying Patent No. 1,022,642 and such of the other Podlesak patents as plaintiff might desire to use, or to cease manufacturing under said Podlesak patents entirely.

This defendant denies that the contracts Exhibits C and D were induced by, or the result of any threats or demands by this or by the defendant Henry Joseph Podlesak whatsoever, and alleges that said contracts were the result of long and protracted negotiations, which extended and were conducted intermittently between March 30, 1912, and February 5, 1914, due in part to plaintiff's uncertainty whether it would continue in business, in the course of which these defendants were not represented by any attorneys, but that the plain-

tiff was represented by its attorneys, and that said contracts were, at plaintiff's instance, drawn by the plaintiff's attorneys and submitted to these defendants and executed as finally, fully and freely agreed upon by said plaintiff, and 201 not otherwise; and defendant admits that Exhibits C and D were both entered into as part of the same transaction, having to do generally with plaintiff's rights to manufacture and sell under the Podlesak patents, therein mentioned. That for convenience of reference, hereto annexed, marked Defendant's Exhibit 4, which defendant prays may be deemed a part of this answer, is a schedule showing the history of each patent, the name of the inventor, and patentee, character of device, and the contract, Plaintiff's Exhibit, which grants the plaintiff the right to manufacture and sell each invention.

12. Answering subdivision XV, defendant admits that the plaintiff and defendants Podlesak proceeded to, and did, act under Exhibits C and D until the 20th of February, 1915, at which time the contract Exhibit E was executed between the parties; that the result of said Exhibit E operated as a reduction in the royalties upon each machine subject thereto, to be paid by said plaintiff to the Podlesak brothers; that the negotiations finally resulting in the contract Exhibit E extended over five or six months. Defendant denies that there existed prior to the execution of the supplemental agreement Exhibit E, January 20, 1915, any oral agreement or understanding relating to a change in the royalties or the manner of payment thereof; and alleges that the only change made in the contracts Exhibits C and D is that set forth and contained in the supplemental agreement Exhibit E aforesaid.

13. In answer to the allegations of the XVIth subdivision of said complaint, defendant alleges that on the 15th day of April, A. D. 1912, when application resulting in letters patent 1,055,076 was made, this defendant was not under any agreement whatever with plaintiff to turn over said or any inventions made by him, or any patent granted thereon, to plaintiff, and that plaintiff had no right whatsoever there- 202 in excepting a right to acquire a shop right license thereunder, pursuant to the terms and conditions of the contract, Defendant's Exhibit 2; that said Letters Patent 1,055,076, were granted March 4, 1913. That thereafter and late in the year 1914, the plaintiff, who was contemplating suit for infringement against certain manufacturing corporations, as defendant is informed and verily believes, took up said

Letters Patent 1,055,076 with plaintiff's patent attorneys and was advised by said attorneys that said patent would be surrendered and application for reissue be prepared and prosecuted, in order to correct errors in the specifications of said patent and to aid in its case against the parties deemed by plaintiff to be infringing the same; that accordingly application for reissue was prepared by plaintiff's attorneys and executed by this defendant at plaintiff's request, and as said defendant was under the contract Exhibit D, dated February 5, 1914, obligated to do, and for which said plaintiff under said contract was obligated to pay, and not otherwise. And defendant admits that said application was prosecuted and the Letters Patent were reissued February 9, 1915, under and as No. 13,878; denies that the prosecution of said application and the securing of said reissue was for plaintiff.

Further answering and excepting only as hereinbefore expressly admitted, qualified or explained, defendant denies each and every allegation contained in subdivisions VIII to XVI, both inclusive, of plaintiff's complaint.

14. Answering generally the allegations of subdivisions VIII to XVI, inclusive, of plaintiff's bill of complaint, and the claim of plaintiff of title to or ownership of defendant's inventions, applications for patent and letters patent, and the plaintiff's claim that it ever owned or now owns said inventions, or any of them, or any part thereof, or any exclusive right thereunder, or any rights therein or there-to other, greater or different than have been expressly granted under temporary shop right licenses from time to time, and under the contract Plaintiff's Exhibits C, D and E, this defendant, denying all such allegations and claims, and repeating his denial thereto and thereof wherever such allegations and claims appear in said complaint, alleges, that he never at any time, by word or act, granted to, or gave plaintiff to understand that it had, any rights in any of defendant's inventions, applications for patents, or patents thereon, or any part thereof, other or different than the right to manufacture, use, and sell devices embodying such of said improvements as plaintiff desired from time to time to manufacture and sell, under and by virtue of the contract Defendant's Exhibit 2, and of temporary shop right licenses and permits as hereinbefore more specifically alleged, and finally under the contracts Plaintiff's Exhibits C, D and E.

15. And this defendant, denying that the contract Defendant's Exhibit 1 of this answer was in force or effect when

the inventions of this defendant here in controversy were made, alleges that if, notwithstanding such denial, the court should find the contrary, that nevertheless said contract did not and does not of its own force and virtue vest in plaintiff any rights, title or interest in defendant's inventions, but, on the contrary, left it optional with plaintiff to adopt and pay the expense of patenting defendant's inventions made during the period while said contract was in effect; that plaintiff did not at the time any of said inventions were made, or at any time since, advise this defendant that said improvements, or any of them, were valuable to plaintiff, or that said plaintiff considered it desirable to patent them, or offer to defray the expenses of patenting the same, or make any request or demand whatever for the assignment of said improvements, or any of them, and did not in any respect comply with the requirements of said contract Defendant's Exhibit 1 in that behalf; and that, because of the premises, in event the court finds that said contract Defendant's Exhibit 1 was in force during said period, plaintiff should nevertheless be held and adjudged to have waived and relinquished any and all claim it might otherwise have had in said inventions and each of them, arising out of said contract or defendant's employment thereunder.

And defendant, repeating the allegation that his inventions here in controversy were each and all conceived, made, and reduced to practice during the period when the contract Defendant's Exhibit 2 was in force, and not otherwise, states that in each instance, during the progress of defendant's work in that behalf, said inventions were offered to plaintiff under and pursuant to the terms and provisions of the contract Defendant's Exhibit 2, and to no one else, and that it was only after plaintiff refused to assume or agree to pay the expense of the preparation and prosecution of applications for patents, that defendant took out the patents thereon on his own account and at his own cost and expense, as more particularly alleged in subdivision 9 of this answer.

16. Defendant further alleges that plaintiff did not at the time said inventions were made, or at any time since, up to the time of the commencement of this action, make any claim of title to, or ownership of, said inventions or any of them; and that said plaintiff never claimed any rights therein other or different than it could have acquired under the terms and provisions of the contract, Defendant's Exhibit 2; and that said plaintiff in and by the second paragraph of the contract Plaintiff's Exhibit D, has ratified, confirmed and approved

all and singular the acts and counts of the defendants Podlesak, now charged by plaintiff as fraudulent and wrongful, in the matter of the making, filing and prosecution of the applications for patents on this answering defendant's inventions here in controversy, up to February 5, 1915, and 205 agreed that the prosecution of said applications should continue in the name, on behalf and at the expense of this defendant as theretofore, and that the defendant Henry Joseph Podlesak should aid and assist this defendant in said matters.

17. That said plaintiff, having, on and after the 30th day of March, 1912, lost its rights under the contract of November 2, 1908, Plaintiff's Exhibit A, as stated in paragraph 5 of this answer, and as the fact is, operated under temporary licenses given to, at plaintiff's request, and accepted by, plaintiff from time to time, to fill orders as they were received by plaintiff, from said March 30, 1912, up to and including February 5, 1914; that on August 17, 1912, the agreement, Exhibit B of plaintiff's complaint, was entered into between the defendants Podlesak, assigning to each other interests in the letters patent and applications therein mentioned; that a part of the consideration for said contract, Exhibit B, was the work done by said Henry Joseph Podlesak, in the preparation of the applications for this defendant's patents mentioned in paragraphs VIII and XVI, of said bill of complaint; that said plaintiff was fully advised of said agreement and made no objection thereto, but on the contrary continued to negotiate with both the defendants Podlesak, through the defendant Henry Joseph Podlesak, on the basis of the fact that said last named defendant was the lawfully owner and holder of the interests in the inventions, and the applications for patents, and the patents issued to this answering defendant and conveyed by him to said Henry Joseph Podlesak under the contract Exhibit B, and upon the further basis of the fact that this answering defendant had and owned the interest specified in the contract Exhibit B, in and to the patents upon the joint inventions of the Podlesak Brothers and the separate inventions of the defendant Henry Joseph Podlesak 206 mentioned in said contracts Exhibits C and D; and that said plaintiff did not at any time while said negotiations were in progress claim any right, title or interest whatsoever in or to any of the inventions or patents of this answering defendant.

18. That during the period covered by the negotiations

which finally resulted in the contracts Plaintiff's Exhibits C and D, the plaintiff and its attorneys had before them and had knowledge of defendant's employment contracts Exhibits 1 and 2, as well as all and singular this defendant's inventions, applications for patents, and the patents theretofore granted thereon, and was by the defendants Podlesak given the right freely to select those of this defendant's inventions it might desire to incorporate in plaintiff's product; and that the plaintiff selected those inventions of this defendant listed in defendant's Exhibit 4 hereof to which reference is made, which were finally incorporated in the contract Plaintiff's Exhibit D. That excepting only the joint invention of the defendants Podlesak evidenced by Application Serial No. 76559, filed September 25, 1901, on which was granted March 18, 1913, Letters Patent No. 1,056,360, and the separate invention of Henry Joseph Podlesak evidenced by patent No. 1,022,642, granted April 9, 1912, the inventions, applications for patent and patents set forth and described in the contract Plaintiff's Exhibit D are the identical inventions, applications for patent and patents mentioned in subdivisions IX, XI, XII, XIII, XIV, XV and XVI of plaintiff's bill of complaint. That said plaintiff repeatedly, both prior to and at the time the contracts Plaintiff's Exhibits C and D were executed, advised the defendants Podlesak that it had no use for the inventions not included in said contracts Plaintiff's Exhibits C and D, and rejected the same; and that because thereof, all rights now claimed by plaintiff in the invention of this defendant not embraced within and granted under the terms and provisions of the contracts Plaintiff's Exhibits C and D, remained in the defendants Podlesak.

207 19. Defendant further alleges that, as appears by its terms, said contract, Plaintiff's Exhibit D, grants to said plaintiff a non-exclusive shop right license under letters patent 1,056,360, which is the joint invention of the defendants Podlesak, made long prior to the time this defendant entered into plaintiff's employment, and upon letters patent No. 1,022,642, which was and is the separate invention of the defendant Henry Joseph Podlesak, who was never in the plaintiff's employ, and to each which last named patents said plaintiff had no rights whatsoever; that in addition thereto, under the contract Exhibit C, made at the same time and as part of the same transaction, said defendant was granted an exclusive shop right license in the joint inventions of the defendants Podlesak, therein mentioned and described, which joint inventions were devised and invented by the defend-

ants Podlesak jointly long prior to the time this answering defendant entered into plaintiff's employ.

20. Defendant further alleges that after the contracts Exhibits C and D were executed, the plaintiff, as alleged in subdivision XV of its bill of complaint, continuously operated thereunder, manufacturing and selling magnetos and inductor generators and the accessories covered by the patents specified in said contracts, and paying the royalties prescribed therein, without claim or question, up to the 20th day of January, 1915, when the supplemental agreement, Exhibit E of said bill of complaint, was executed; and that thereafter said plaintiff continued to operate under said contracts, Exhibits C, D and E, without claim or question as to the existence of any rights in the patents granted to this answering defendant during the period when he was employed by said plaintiff, other or different from the rights specified in said contracts; that defendant's employment with plaintiff was terminated May 14, 1915; that said plaintiff made

no claim at any time at or subsequent to the termination of said employment of any rights in and to said inventions or patents, other or different from the rights provided in said contracts Exhibits D and E, and that at no time between the 10th day of August, 1909, and the time of the commencement of this action did said plaintiff make any claim whatsoever in and to defendant's said patents or any of them, adverse to the rights of this defendant, or other or different from the rights granted to said plaintiff under said contracts Exhibits C, D and E.

21. Defendant further alleges that, relying upon the foregoing situation, and honestly believing that said plaintiff had no rights, and did not claim any rights in defendant's inventions made during the period of said employment or in the patents thereon, other or different from the rights expressly granted by the defendants Podlesak to the plaintiff in and by the contract, Exhibit D, and the supplemental contract, Exhibit E, this defendant joined in the execution of the transfer of his interest in said patents and in the contracts Exhibits C, D and E, to the defendant corporations, on the fourth day of September, A. D. 1915, in the so-called "Splitdorf Contract", Plaintiff's Exhibit F, to which reference is hereby made, and in and by which this defendant transferred to said defendant corporations all of his right, title and interest in and to the inventions and patents thereon, described in said Exhibits C, D and E, and did further in and by said contract, Exhibit F, covenant and warrant to said defend-

ant corporations that he had good right to make said transfer, and that said transfer carried to said defendant corporations all this defendant's rights in and to said patents not previously transferred to the plaintiff under said contracts Exhibits C, D and E.

22. Defendant further alleges that by virtue and because of the foregoing, if said plaintiff ever had any rights in and to the defendant's inventions, or the applications for patent, or the patents thereon, described in Exhibit D, growing out of the employment of this answering defendant by the plaintiff, said rights became extinct upon the execution of the contract, Exhibit D, and all rights therein became finally merged in said contracts, C, D and E; that said plaintiff should be held and adjudged, under the terms of the employment contract, Defendant's Exhibit 2, and for a good and valuable consideration expressed in said contracts, Exhibits C, D and E, and by plaintiff received, to have waived and relinquished any and all rights, if any, and any and all claims of right, if any, it might otherwise have had in and to this answering defendant's inventions and the letters patent thereon, other and different from those expressly granted in Exhibits C, D, and E aforesaid; that said plaintiff should be held and adjudged to have acquiesced in the original, sole and undisputed ownership of and in this defendant of his inventions and in said letters patent, and in the transfer of the portion of defendant's interests therein to the defendant Henry Joseph Podlesak under the contract Plaintiff's Exhibit B; that said plaintiff should be held and adjudged to have fully ratified and confirmed the contracts Exhibits C and D by the execution of, and operation on its part under, the contract of January 20, 1915, Plaintiff's Exhibit E, in the affirmance thereof, and by its election to affirm said contracts taken and made by its bill of complaint in this case; that said plaintiff was and is, and should be held and adjudged, guilty of gross and inexcusable laches and negligence is not asserting any rights or claim of right which it now claims in said inventions of this defendant and the patents thereon at the time said Exhibits C and D were being negotiated; and that said plaintiff is and should be held and adjudged to be estopped and precluded by and under said contracts Exhibits C, D and E, and by its election to affirm said contracts made and taken in this case, and by its conduct, from now claiming or being heard to claim any other or different rights in this defendant's said inventions

210 and patents than the rights expressly granted under the contracts C, D and E, and from now claiming or being heard to claim that this defendant had no right to transfer his interest in said patents and in said contracts Exhibits C, D and E to the defendant corporation under said contract, Plaintiff's Exhibit F, termed in the bill of complaint the "Splitdorf Contract".

23. Answering the XVIIth subdivision, this defendant denies that plaintiff has fully and faithfully kept and performed each and all of the terms and agreements contained in the contracts Exhibits C, D and E on plaintiff's part; and alleges that said plaintiff has failed and neglected to account for and to pay over to this defendant and to the defendant Henry Joseph Podlesak all the royalties which accrued for the quarterly period ending June 30, 1915, and the royalties which accrued under said contracts to the defendants Podlesak prior to the assignment thereof dated September 4, 1915, Exhibit F of the bill of complaint, or for the quarterly period expiring September 30, 1915, in accordance with the true meaning, intent and spirit thereof, and has sought to secure unwarranted deductions from the royalties for the quarter expiring June 30, 1915, and to go back of and surcharge plaintiff's accounts rendered and settled for by it during previous royalty periods, and has in its administration of said contracts construed them against the defendants Podlesak in a manner unduly harsh and severe, for the purpose, as this defendant is informed and verily believes and charges the fact to be, of endeavoring to enforce the allowance by the defendants Podlesak of deductions from the moneys justly due said defendants, and in indulging in long correspondence with the defendant Henry Joseph Podlesak with a view of attempting, as this defendant is informed and verily believes, to secure admissions and to create estoppels as against these defendants in the assertion of their just rights under said contracts; and has since defendant's discharge

from plaintiff's employment, May 14, 1915, further 211 ther breached said contract, as previously construed and acted upon by the parties, by cutting the name "Podlesak" out of the electro-types and printed matter illustrating said device in plaintiff's advertising matter, and by changing the location of the same "Podlesak" upon the magnetos and ignition devices manufactured by said plaintiff from a prominent and most conspicuous place to an inconspicuous place where said name cannot be seen or read read-

ily by prospective and intending purchasers thereof. Defendant denies that he has, or the defendants Podlesak have, in any manner failed or neglected to keep or perform the terms and conditions of the contracts between plaintiff and the Podlesaks on his or their part, and alleges that they have faithfully kept and performed said contracts on their part; and denies that he, either alone, or with his brother Henry Joseph Podlesak, has conspired or confederated with the defendant corporations or either of them to cheat or defraud the plaintiff in any manner or out of any right or thing whatsoever; and denies that this defendant has ever acted, or now acts, in confederation or conspiracy with said defendant corporations, or with the defendant Henry Joseph Podlesak, for any object or purpose whatsoever in any manner having to do with plaintiff; and further defendant says he is without knowledge of the remaining allegations of subdivision XVII of said bill of complaint.

24. Defendant says that he is without knowledge of the allegations of paragraph XVIII of said bill of complaint.

25. Answering subdivision XIX of said bill of complaint, defendant admits on information that the defendant Sumter Electrical Company has been and is now engaged, among other things, in a business similar to that conducted by, and in competition with, plaintiff. Defendant is without knowledge as to the business of the defendant Splitdorf Electric

Company. In the matter of the alleged infringement of 212 letters patent No. 1,101,156 or of reissue No. 13,878, defendant admits that on or about July 31, 1915, this defendant was advised that plaintiff claimed that said defendant corporation was infringing reissue patent No. 13,878, and was requested by plaintiff and by its attorneys to subscribe to a bill of complaint against said Sumter Electrical Company because thereof, in an action to be instituted against said Company in the District Court of the United States for the Eastern District of South Carolina; that defendant had no opportunity to, and did not, examine and compare said devices, but executed said bill of complaint upon request of and in sole reliance upon the opinion of the counsel for the plaintiff, an expert patent attorney and solicitor, who prepared said bill, and believing the facts to be as therein stated, and in pursuance of the second paragraph of the contract Exhibit D between plaintiff and the defendant Podlesaks; and defendant alleges that he is, excepting as hereinbefore stated, without other knowledge as to the fact of infringement of

said patents or either of them. Further answering, defendant says that he is without knowledge of the remaining allegations of said subdivision XIX.

26. Answering subdivision XX of said bill of complaint, defendant denies that he called, or in any manner caused to be called, to plaintiff's attention the alleged fact that said defendant corporations or either of them had infringed or were infringing any of the Podlesak patents, and denies that he, either in person or through the defendant Henry Joseph Podlesak, urged or insisted that plaintiff institute action against the defendant Sumter Electrical Company, and alleges that he had no knowledge that plaintiff had said, or any, Sumter suit in contemplation until he received a letter from plaintiff's solicitor enclosing the bill of complaint, 213 with an urgent request that he sign and verify said bill and return it to plaintiff's solicitor without delay; denies that said action was instituted or prosecuted at any suggestion, request or demand whatsoever from or on the part of this defendant; and denies that the attorneys to whom plaintiff returned said bill were the attorneys of the defendants Podlesak in fact, and alleges that said attorneys were not hired or employed by the defendants Podlesak in said action, but were hired and employed solely by said plaintiff by virtue of its authority under said contract Exhibit D. Denies that he approved or consented to his joinder in said bill any farther than he deemed himself bound to be joined at plaintiff's election under Exhibit B. That as to the remaining allegations of said subdivision XX of said bill of complaint, defendant says he is without knowledge.

27. Answering subdivision XXI of said bill of complaint, defendant denies that he advised or acquainted the Sumter Electrical Company or the Splitdorf Electric Company, or any other person whatsoever, of the fact that the plaintiff's bill of complaint was in preparation; and denies that he informed either said corporations or any person whatsoever that said action, or any action whatever, was in contemplation or would be, or had been instituted; and alleges that this defendant did not in any manner, either directly or indirectly, approach or communicate with said corporations or with either of them, or with any officer, agent or employee of said corporation, or with any person whatsoever, other than plaintiff's secretary and plaintiff's attorney or solicitor, about said suit; and denies that he did in any manner connive or con-

spire with said Splitdorf Electrical Company or Sumter Electrical Company, or with any person, firm or corporation whatsoever, to violate any rights of said plaintiff under any contracts whatever, or otherwise, or for any other purpose whatever.

214 28. Defendant admits the execution and delivery, on September 4, 1915, of the assignment and contract marked Exhibit F, and termed the "Splitdorf Contract" in the complaint, between the defendants Podlesak and the defendant corporations, and admits that the copy attached to plaintiff's bill of complaint is substantially correct, barring typographical errors, and excepting that on the first page of said copy, Exhibit F, letters patent No. "947,647" is erroneously numbered "949,647", and that near the bottom of page 96 of said bill of complaint, and between the word "applications" and the words "said agreements" the word "or" is erroneously written "on". Defendant denies that he entered into any fraudulent or corrupt arrangement or conspiracy with the defendant corporations; denies that said contract Exhibit F was or is a pretense, and admits and alleges that under and by said contract Exhibit F this defendant did sell and assign to the defendant corporations all that said contract specifies by its terms; admits the receipt by the defendants Podlesak of the first payments, aggregating the sum of \$25,000, and as to the remaining allegations, denies that said contract was executed by the defendants Podlesak pursuant to, or as a part or parcel of, any fraudulent arrangement or conspiracy, and denies that said contract Exhibit F was executed pursuant to any conspiracy or for any ulterior purpose whatsoever, or for any purpose or to accomplish any aim or object or to grant any rights other or different from what said contract Exhibit F contains and purports to grant on its face; and alleges that said contract was made in entire good faith; that if, as claimed in the complaint, said defendant corporations, or either, have made, or are attempting to make any wrongful or improper use of said contract, it is without the knowledge, consent or approval of this defendant; and as to the remaining allegations of subdivision 215 sion XXI of said bill of complaint not herein specifically answered, defendant alleges that he is without knowledge. Defendant denies that the contract Exhibit F is susceptible of any different construction from what said contract

contains on the face thereof, and in that behalf submits said contract to the court.

29. Answering subdivision XXIII of said bill of complaint, this defendant alleges that long prior to November 2, 1908, the date of the contract, Plaintiff's Exhibit A, the defendants Podlesak had established a good reputation in the comparatively limited field of the manufacture and use of the appliances embraced within the early Podlesak inventions; that the defendant Henry Joseph Podlesak was never in plaintiff's employ, and that he conducted his experiments subsequent to plaintiff's employment upon his own account and invented other valuable improvements in said devices; that defendant was discharged by plaintiff on May 14, 1915, and released from all further duty under his contract of March 3, 1913, defendant's Exhibit 3; that thereafter the defendants Podlesak set about preparing to manufacture the devices mentioned in contract plaintiff's Exhibit D, under the reservation therein contained (See Bill, p. 85), had secured promises of orders and were preparing to make deliveries on or about November 1, 1915; that while said preparations were going on, and on or about August 20th, 1915, the defendants Podlesak were approached by the defendant corporations and requested to name a price and to give an option upon the Podlesak patents and their rights under the contracts, plaintiff's Exhibits C, D and E, which they did, and which finally resulted in the contract of September 4, 1915, between the defendants Podlesak and the defendant corporations, Exhibit F of plaintiff's complaint. Defendant denies that the Podlesaks had no good will connected with

that field or business, and denies that the only good will
216 this answering defendant has was in connection with the plaintiff's business, denies that it was or is the purport or intent of the Splitdorf contract, Plaintiff's Exhibit F, to convey or to attempt to convey to the defendant corporations any part of the good will of plaintiff's business, or its right to use and apply the name "Podlesak" to the product of plaintiff manufactured or sold under the Podlesak patents.

That, as this defendant is informed and verily believes, it was and is the intent of the contract, Plaintiff's Exhibit F to convey to the defendant corporations the benefit only of such reputation as each defendant Podlesak had acquired in the field covered by said patents, dissociated from the plaintiff,

and which they could lawfully convey, and said defendant corporations could lawfully acquire, as well as the benefit of the business the defendants Podlesak were about to prosecute, together with the right in said defendant corporations to use the name "Podlesak" in connection with said business to the same extent each the defendants Podlesak could use his own name in said business had said contract Exhibit F not been made; and subject to all the rights which the plaintiff may have under the contracts Exhibits C, D and E.

And, in this behalf, defendant alleges, that the only right acquired by the plaintiff in or to the name "Podlesak" was and is to annex the surname of the inventors to the magnetos themselves in connection with the word "Patented", as provided in the contracts Plaintiff's Exhibits C and D, pages 79 and 86 of plaintiff's bill of complaint, to which reference is hereby made. That neither he nor his brother Henry Joseph Podlesak have in any manner granted to plaintiff an exclusive right to the use of the name "Podlesak" in connection with plaintiff's business, or the field covered thereby, or any rights other or different from the right to affix said name to the devices specified in Exhibits C and D embodying the 217 Podlesak inventions therein specified.

That, as this defendant is informed and verily believes, and claims and charges the fact to be, he never parted with his right to use the name "Podlesak" in connection with the manufacture and sale of the devices specified in the contracts Exhibits C and D, or in any business in which this defendant might thereafter engage in competition with the devices manufactured and sold by plaintiff under the contract Plaintiff's Exhibit C; and that he could lawfully sell the right to the use of his name in connection with his right to manufacture and sell under the contract Plaintiff's Exhibit D, or under any other inventions he has made not embodied in the contracts C, D and E, or might make and perfect after the termination of his employment with said plaintiff.

Further answering said plaintiff's claim to the right to use the name "Podlesak", defendant alleges that said plaintiff has never acquired any right thereto by use or otherwise, that plaintiff has never advertised any of the devices, parts of or accessories thereto under the name "Podlesak", other than to have said name appear on cuts and electrotypes illustrating said device about where said name formerly appeared on the magneto itself, and has only on one occasion referred in its

printed matter to the fact that the magneto or any part thereof was manufactured under the Podlesak patents; but on the contrary, has always advertised and sold it as the "Milton", "Milton Improved", "Webster Milton"; "Webster Tri-Polar Oscillator" or the "Webster Magneto"; that the names "Milton" and "Webster" have always been the only names used and advertised in connection therewith; that since the 14th of May, 1915, when this defendant, as herein-after more fully shown, was without just cause discharged from his employment with plaintiff, the plaintiff, falsely and with intent to injure this defendant, advertised to the 218 trade that defendant was no longer connected with plaintiff, has cut the name "Podlesak" off its cuts and electrotypes illustrating said magneto where said name had previously been displayed, and, has caused the name "Podlesak" to be removed from the top part of the magnetos themselves, where it had theretofore at all times been prominently displayed and could be readily seen, to an obscure place on the side near the bottom, where it would not be noticed by a prospective purchaser unless searched for specially. Defendant denies that the use of the name "Podlesak" by said defendant corporations upon any product said defendant corporations are authorized lawfully to manufacture or sell under or by virtue of the Splitdorf contract, was or is calculated to mislead or deceive, or would mislead or deceive intending purchasers into believing that the product of said defendant corporations is the product of said plaintiff, or that said "Splitdorf contract" can, or is calculated to, furnish said defendant corporations any ground or pretense to claim that said defendants have acquired any portion of the good will claimed by the plaintiff in the name "Podlesak" or of the plaintiff's business; and denies that the effect of said Splitdorf contract, Plaintiff's Exhibit F, is, or is intended to be, to enable said defendant corporations to appropriate any part of plaintiff's good will or of the public demand for plaintiff's said product.

Defendant admits that plaintiff's product has acquired an extensive and valuable reputation; denies that the reputation which plaintiff's product has acquired was built up by plaintiff, and alleges the fact to be that the reputation of the Podlesak inventions and the reputation of said Podlesaks in said field was established by the defendants Podlesak prior to the time they entered into business relations with plaintiff;

and denies that plaintiff has expended any large sums
219 of money in building up its business under said Podlesak patents or the "Podlesak" name, and alleges that the large sums expended by plaintiff were in an unsuccessful attempt to perfect other magnetos and internal combustion engine ignition devices than those covered by the Podlesak patents.

Defendant denies that, either alone or with Henry J. Podlesak or in any other manner, he has infringed, or aided, abetted or encouraged the defendant corporations in any infringement or threatened infringement of the Podlesak patents or of plaintiff's rights thereunder, in the Eastern Division of the Northern District, or anywhere else, or in the alleged purpose of said defendant corporations unfairly to compete with plaintiff; and denies that he has in any manner threatened, or agreed, or proposes in any manner in the future, or otherwise, to infringe, or to aid, abet, encourage or assist said defendant corporations in any infringement or infraction of plaintiff's rights, or in any unfair competition with plaintiff. As to the remaining allegations of subdivision XXIII of said bill of complaint, defendant alleges that he is without knowledge.

30. Defendant admits full knowledge of the contracts Exhibits C, D and E; denies that the "Splitdorf contract", Exhibit F, was or is a breach of any contract between defendant and plaintiff, or in violation of any rights of said plaintiff; denies that defendant is in any respect a trustee for plaintiff; denies that said defendant corporations became successors in or under any trust whatever; and denying the existence or creation of the trust alleged, denies that this defendant has betrayed or proven unfaithful to any alleged trust, or that this defendant has betrayed any trust; and alleges that defendant is without knowledge of the remaining
allegations of subdivision XXIV of said bill of complaint.

220 31. Defendant denies that he was or is without right, power or authority to grant the rights granted under the contract Exhibit F; and alleges that he is without knowledge of the allegations of fact contained in subdivisions XXV and XXVI. Answering subdivision XXVII of said bill, defendant admits that Williams and Bradbury and Lynn A. Williams have handled plaintiff's patent matters, business and litigation, and were plaintiff's solicitors and counsel named in the bill of complaint signed by defendant in plain-

tiff's suit against the Sumter Electrical Company; and as to the remaining allegations of subdivision XXVII of said bill of complaint, this defendant is without knowledge.

32. Answering that portion of subdivision XXVIII which pertains to this defendant, defendant alleges that the contracts Exhibits C, D and E, provide and require only what is stated and agreed in said contracts and nothing else, and denies that said contracts or any of them were or now are susceptible of any different meaning, and submits said contracts to the court. Defendant admits that there is an account now due for the quarterly period ending September 30, 1915, in which this defendant has an interest for that portion of said period expiring September 4, 1915. Defendant denies that it was or is a part of any fraudulent arrangement or conspiracy between the defendants Podlesak and the defendant corporations that the defendant companies shall examine plaintiff's books, directly or indirectly through the Podlesaks or an agent or attorney designated by them; denies the existence of any arrangement, combination or conspiracy whatsoever; denies any intention or desire to make use of any information which may be contained in the royalty report in which this defendant is interested or to disclose any such information to any of the defendant corporations; denies that the plaintiff will be obliged to make default under said contracts, and as to the remaining allegations of said subdivision XXVIII this defendant alleges that he is without knowledge.

221 3. Answering subdivision XXIV, defendant denies that he has planned or has any intention, either alone or in connection with the defendant corporations, to defeat any litigation which may be instituted by plaintiff to protect its rights under the Podlesak patents; denies that he has any intention of preventing or attempting to prevent plaintiff from instituting or maintaining such litigation; admits that under the license contracts, Exhibits C and D, plaintiff has the right to use the names of said Podlesaks if so desired, in such litigation, within the limits therein prescribed, so long as plaintiff is not in default under said contracts; and in further answer as to the extent of plaintiff's rights in the premises, defendant submits said contracts C, D and E to the court; and as to the remaining allegations of said subdivision XXIX, defendant alleges that he is without knowledge.

34. Answering subdivision XXX, defendant admits that

plaintiff's business has not heretofore been profitable and has sustained considerable losses which have been made good by loans to plaintiff by certain of plaintiff's stockholders; denies that any such losses have been incurred in the development of plaintiff's business under said Podlesak patents. Admits that plaintiff's business has been more profitable during the first five months of the present year; and as to the remainder of said year 1915, defendant is without knowledge; admits that during the time this answering defendant was employed by plaintiff, he has been paid for his services, up to June 1, 1915, and in that behalf alleges that he in every instance rendered full value therefor; admits that payments have heretofore been made to the defendants Podlesak by way of royalties under said license agreements, but denies that plaintiff has paid all royalties now due the Podlesaks; admits that during the month of May, 1915, he ceased to be employed by the plaintiff; and in this behalf alleges that instead of his resignation being accepted, as alleged, he was 222 discharged from such employment without just cause;

denies that he has ever boasted that he would bring about injury or distress to plaintiff, or that he would be reinstated as an employee of plaintiff under different management, or that he would bring plaintiff into such condition that it would be obliged to sell out and turned over its business to some competitors; but on the contrary, defendant alleges that after his employment with said plaintiff was terminated as aforesaid, he refused offers of employment from other concerns in the same business as plaintiff; that he has not been in any employment by any of plaintiff's competitors; and that this defendant has never by word or act, in any form or manner, said or done anything whatsoever which would injure in any degree the business of the plaintiff. Said defendant denies the existence of any plans in which this defendant is in any manner involved, and denies all knowledge of any plans, and denies that he has entered into any arrangement whatsoever with Henry Joseph Podlesak or with the defendant corporations, or with any other person whatsoever, to carry out any plans to ruin plaintiff's business; and denies specifically that he ever had any such idea in mind.

Further answering, defendant says that he is without knowledge as to the remaining allegations of subdivision XXX of said bill of complaint as amended, not hereinbefore specifically answered.

35. Answering subdivision XXXI, defendant, denying such

infringement and unfair competition, denies that he is prepared or ready to continue any alleged infringement or unfair competition against the plaintiff; and denies that said plaintiff will suffer any injury whatever at the hands of this defendant; and as to the remaining allegations of said subdivision XXXI, this defendant says he is without knowledge:

36. And answering generally said complaint, this defendant alleges that the contract Exhibit F, termed the "Split-dorf Contract", was made between the defendant Podlesak on the one hand and the defendant corporations on the other, in entire good faith in so far as the defendants Podlesak were and are concerned, and in full recognition of and subject to the rights of the plaintiff under the license contracts, Exhibits C, D and E, set out in said bill of complaint; that said contract was not solicited or requested by the defendants Podlesak; that in the making of said contract, this defendant sold his rights under said patents and in the contracts, Exhibits C, D and E, to said defendant corporations, as he deemed and now deems he had and has a perfect right to do; that this defendant has not since September 4, 1915, been in any manner interested in the magneto business, has not in any manner colluded, combined or conspired with the defendants, or any of them or with any other person, firm or corporation whatsoever, to in any manner prejudice or injure the rights of the plaintiff, either under said Podlesak patents or under the license agreements between the Podlesaks and said plaintiff applicable thereto, or otherwise, and in this connection, said defendant alleges that in all matters he has faithfully kept and performed all and singular the obligations between him and the plaintiff, existing and growing out of the relationship which existed between the parties, and has not in any manner used or attempted to use any knowledge which this defendant may have acquired of or concerning plaintiff's business, methods, plans, trade, customers or any other breach or aspect thereof, and has not divulged or attempted to divulge to any of the defendant corporations or to any other person whatsoever any knowledge or information gained by this defendant while he was in the employ of said plaintiff.

37. Defendant denies that plaintiff has been injured by or at the hands of this defendant in the sum of Three Thousand Dollars (\$3000) or any other sum; and denies that the value of said plaintiff's rights in so far as this defendant is 224 concerned in said action is equal to or in excess of said sum of Three Thousand Dollars (\$3000); and denies that

in so far as this defendant is concerned, the plaintiff's remedy is only in equity, but on the contrary alleges that if said plaintiff has any cause of action against this defendant, its remedy is at law, and that, as hereinbefore shown, no cause of action against this defendant, either at law or in equity, has been stated or alleged in said bill of complaint.

38. Further answering, this defendant denies each and all of the numerous conclusions of law set out in said bill of complaint as amended which have not been specifically controverted herein.

39. And this defendant, having fully answered to the said bill of complaint in so far as he is advised the same is material or necessary to be answered unto, denies that the plaintiff is entitled to the relief, or any part thereof, in the Bill of Complaint prayed for, or any relief whatsoever; and prays the same advantage of his aforesaid answer as if he had set up by motion the several matters and things aforesaid where a motion would have been proper; all of which matters and things this defendant is ready and willing to aver, maintain, and prove, as this Honorable Court may direct, and prays to be hence dismissed with his reasonable costs and charges in this behalf most wrongfully sustained.

(Signed) TESLA EMIL PODLESAK

THOMPSON, MYERS & O'KEARNEY,
Solicitors for said defendant.

(Signed) WILLIAM D. THOMPSON,
Of Counsel.

225 State of Wisconsin }
Racine County } ss.

TESLA EMIL PODLESAK, being first duly sworn, on oath deposes and says, that he is the defendant of that name mentioned in the bill of complaint and in his answer in the foregoing entitled action; that he has read the above and foregoing answer signed and subscribed to by him and known the contents thereof, and that the same is true of his own knowledge, excepting the matters therein stated on his information and belief, and as to those matters he believes it to be true.

(signed) TESLA EMIL PODLESAK.

Subscribed and sworn to before me this 2nd day of December, A. D. 1915.

(signed) LULU M. LUNN
Notary Public, Wis.

My commission expires March 3, 1918.

226

DEFENDANT'S EXHIBIT 1.

Hertz Electrical Co.
1075-1111 East 15th Street
Chicago

T.K.W.—LK

August 10, 1909

Mr. Emil Podlesak,
Chicago, Ill.

Dear Sir:—

In consideration of your giving us your entire time and your best services in the interests of our Company, we agree to employ you, at the rate of \$125.00 per month.

Your duties will be of various character, but chiefly in designing attachments for the Milton Magneto to attach it to stationary gas and gasoline engines and also as consulting electrician.

It is understood that should the business demand it, you are perfectly willing to go, on our call, to whatever point it is necessary to develop the business.

It is also understood that if in the development of the magneto there should be improvements that are valuable to the Hertz Electric Co. and they consider it desirable to patent them, that such improvements shall be assigned to the Hertz Electric Co. without further consideration other than the present royalties which you now enjoy on the magneto.

Regarding other inventions or improvements which you may make other than pertain to the Magneto will say that if such improvements or inventions should seem to be of value to the Hertz Electric Co. and they desire to manufacture them you are to offer first to the Hertz Electric Co. certain exclusive privileges which may be granted by patents obtained, outside the shop rights which we may legally enjoy.

Yours very truly,

HERTZ ELECTRIC CO.

By T. K. WEBSTER,

Pres.

Accepted Aug 10-09

EMIL PODLESAK.

DEFENDANT'S EXHIBIT 2.

May 10, 1910.

Mr. Emil Podlesak,
Tiffin, Ohio.

Dear Sir:—

For and in consideration of your giving us your entire time in the interest of the manufacture, development and sale of magnetos, we agree to give you a salary of \$1,800, (Eighteen Hundred Dollars) per year, payable in twelve monthly installments of \$150.00 each.

Your position will be that of the Head of the Experimental Department, with the expectation that you may be called upon at times to enter the sales department, as the emergency may require.

Your home shall be in Tiffin, Ohio, and in case you are called elsewhere your expenses will be paid by the company.

We further agree that if you can develop a magneto for use on automobiles, which can be made at a cost which will insure its commercial success, because of any qualities which it may possess, we will pay you, beyond the regular compensation of \$1,800.00, 10% of the net profits for three years dating from the time that the machine is accepted by this company as practical and ready to put on automobiles.

These net profits are to be figured as follows: Say that the cost of the material is \$6.00, and the labor \$3.00, making \$9.00, to this shall be added for operating expenses 20%, making the cost of the magneto for material and labor and operating expenses, \$10.80. To this sum shall be added a further 10%, which shall cover all other expense such as depreciation in plant, interest on investment, &c. This would add a still further cost of \$1.08, making the cost of the magneto, under considerations named above, \$11.88.

To further illustrate, we may suppose that we sold this magneto for \$18.88. This would show a net profit to the Company of \$7.00 and under the Agreement we would pay you, as royalty, or profit, 70 cents (\$0.70) on each machine.

The above proposition is based on the theory that you are able to get patent protection on the United States of America.

At the end of the three year period mentioned above, should the Webster Electric Co. desire to still continue the use of the patents secured by you they will pay you, as a royalty, 5% of the net profits as described above.

Should you not be able to secure Letters Patent, but should develop a machine which we might desire to manufacture we will pay you 5% of the net profits as figured in the foregoing illustration, for a period of three years.

It is further agreed that the cost of the taking out of patents shall be borne by the Webster Electric Co. and prosecuted under your advice and direction.

In the matter of magnetos other than those to be used for automobile purposes we will pay the same royalty and be governed entirely by the existing agreement between us and Henry J. Podlesak et al.

228 We agree to use your designs to the exclusion of all others wherever they may be applied, and in case of our deciding to manufacture some type of machine not covered by the above agreement, and to discontinue the manufacture of your designs or any of them, then all rights therein shall revert to you.

The royalties shall apply to new designs and also to radical improvements in existing designs, and shall be payable quarterly, and the non-payment of such royalties, within sixty days of the expiration of each quarter, shall, on thirty days notice in writing, make this agreement null and void.

The quarterly periods shall be considered as beginning on the first day of each January, April, July and September.

Very truly yours,

WEBSTER ELECTRIC CO.

*Signed by T. K. Webster, Pres. Subject to
the approval by the Board of Directors.*

Accepted,

EMIL PODLESAK.

Memorandum of Agreement made and entered into this 3rd day of March, 1913, by and between The Webster Electric Company, a corporation organized and existing under and by virtue of the laws of the State of West Virginia, party of the first part, and Emil Podlesak, of the City of Racine, State of Wisconsin, party of the second part, Witnesseth:—

Whereas, the said Emil Podlesak is now in the employ of The Webster Electric Company, and, whereas, The Webster Electric Company is desirous of securing for its benefit and

use such improvements in ignition apparatus as said Emil Podlesak may from time to time develop,

Now, Therefore, the parties hereto, in consideration of One Dollar (\$1.00) by each to the other in hand paid, the receipt of which is hereby acknowledged, and for other good and valuable considerations, agree with each other as follows:

(1) The said Emil Podlesak will engage himself to the party of the first part, and the party of the first part hereby engages the said party of the second part as superintendent of its factory for a period of three consecutive years commencing on the first day of January, 1913, on the following terms and conditions:—

(a) The said Podlesak shall receive for the first eleven months of said employment the sum of Two Hundred Ninety-One Dollars (\$291.00) per month; and for the twelve month the sum of Two Hundred Ninety-nine Dollars (\$299.00); and for the following eleven months the sum of Three Hundred Thirty-three Dollars (\$333.00) per month; and for the next succeeding month, being the twenty-fourth month of this term, the sum of Three Hundred Thirty-seven Dollars (\$337.00).

(b) Beginning the twenty-fifth month up to and 230 including the last month of said term of three years, the said party of the second part shall receive the sum of Three Hundred Seventy-five Dollars (\$375.00) per month.

(2) The office designation of the said Emil Podlesak shall be that of "Work's Manager," or such other name as may be suitable and he shall have entire and complete charge of the manufacturing, experimental and production departments of the business of the party of the first part. He shall be responsible directly to the Board of Directors in the discharge of his duties, and shall be guided by its instructions.

(3) Should the said Emil Podlesak obtain any letters patent or rights to letters patent covering any new and useful improvements made during the term of his contract by him in the adaptation, application or construction of the ignition magneto now manufactured by The Webster Electric Company, or should the said Emil Podlesak during the term of this contract make any new and useful improvements in the adaptation, application or construction of the ignition magneto now manufactured by said company, the letters patent, rights to letters patent, patents and applications therefore, obtained and applied for in the United States of America and Foreign countries shall forthwith be assigned to The Webster

Electric Company, to be the sole and absolute property of said Company.

In Witness Whereof, the said The Webster Electric Company has caused this instrument to be signed by its vice-president and its corporate seal thereunto affixed, attested by its secretary, and the party of the second part has hereunto set his hand and seal the day and year first above written.

(Corporate Seal of
The Webster Electric
Company, West Virginia.)

THE WEBSTER ELECTRIC COMPANY
By S. W. LOEB,
Its Vice-President.

Attest:

EMIL PODLESAK,
Secretary.

EMIL PODLESAK, (Seal)

231

DEFENDANT'S EXHIBIT 4.

| Contract Plaintiff's Exhibits of Bill of Com- plaint. | Inventor | Date of Application | Serial No. | Date of Is- sue of Patent |
|---|----------------|------------------------|--------------------|------------------------------|
| | | Original 9/25/1901 | Original 76,559 | |
| Ex. C. | Podlesak | | | |
| " " | Bros. | (1/28/1908) | Div. 477,251) | Jan. 25, 1910 |
| " " | " " | (1/28/1908) | Div. 413,069) | Feb. 8, 1910 |
| " " | " " | (1/28/1909) | Div. 413,068) | Sep. 19, 1911 |
| " D | H. J. Podlesak | 2/17/1909 | 478,355 | Apr. 9, 1912 |
| " " | T. E. " | 4/15/1912 | 690,921 | Mar. 4, 1913 |
| " " | " " | 12/23/1914 | 878,726 | Feb. 9, 1915 |
| " " | Podlesak | | | |
| " " | Bros. | 9/25/1901 | Org. 76,559 | Mar. 18, 1913 |
| " " | T. E. Podlesak | 7/21/1911 | 639,738 | May 26, 1914 |
| " " | " " | 12/27/1911 | 668,153 | June 2, 1914 |
| " " | " " | 11/29/1912 | 734,143 | June 30, 1914 |

232

Patent
Number

Description of Device.

| | |
|------------------------|--|
| 947,647 | (Inductor Generator for Ignition Purposes. Tri-Polar Mag- neto made by Webster Co. |
| 948,483 | (Induction Generator for Ignition Purposes (Magneto, Engine & Spark. Mech. Combustion) |
| 1,003,649 | (Inductor Generator for Ignition Purposes. (Magneto Structure). |
| 1,022,642 | Low Tension Spark. Mech. for Gas Engines. (Spark Plug Detail.) |
| 1,055,076 | Current Generator & Ignition for Internal Combust. Engine (Spark Plug and Bracket Com. |
| Re- Issue 13,878 | Reissue of the above Pat. 1,055,076. |
| 1,056,390 | Inductor Generator for Ignition Purposes. (Bi-polar Magneto not made by Webster Co.) |
| 1,008,052 | Magneto Machine. (Magneto Details & (Structure). |
| 1,008,754 | Inductor Alternator. (Magneto Structure-Details) |
| 1,101,956 | Ignition Device for Explosive Engines. (Starting Lever. The above are divisional applications based on and of original application No. 76,559, filed Sept. 25, 1901. |

233

AMENDMENT TO ANSWER.

F

(Filed February 2, 1916.)

The defendants, Sumter Electrical Company and the Splitdorf Electric Company, leave of Court having first been obtained, amend their joint and several answer in the above entitled action as follows:

Insert after paragraph 32 of said Answer, the following:

"(32-a) These defendants further allege that subsequent to the issuance of the original patent No. 1,055,076 to Emil Podlesak, to-wit: on March 4, 1913, of which the said patent No. 13,878 is a Re-issue, and prior to the date upon which application for said Re-issue was filed, to-wit: December 23, 1914, one of these defendant corporations, to-wit: Sumter Electrical Company, manufactured and sold, in the ordinary and usual course of business, plug oscillators, the manufacture and sale of which plaintiff charges is an infringement of said Re-issued Letters Patents, and which said manufacture and sale, commencing between the dates aforesaid, has been continued up to the time of the commencement of this suit; and these defendants further allege that between the dates aforesaid, the Sumter Electrical Company expended large sums of money in the preparation for the said manufacture and sale of the plug oscillators aforesaid, and that between the dates aforesaid application for Letters Patent of the United States was made by H. R. Van Deventer, as inventor, covering the said plug oscillators so manufactured and sold, and which invention and application therefor was duly assigned to the said Sumter Electrical Company; and these defendants, upon information and belief, further allege that the plaintiff, Webster Electric Company, had knowledge of the said manufacture and sale by the Sumter Electrical Company between the dates aforesaid, as alleged, and these defendants further allege that the said Re-issue Letters Patent were applied for and caused to be issued to the said Emil Podlesak with the intent and purpose of obtaining claims in the said Re-issue, not embodied in the said original Letters Patent, and which would dominate and cover the said apparatus so manufactured and sold by the defend-

234

Interrogatories.

ant, Sumter Electrical Company, between the dates afore-said."

SUMTER ELECTRICAL COMPANY,
SPLITDORF ELECTRIC COMPANY,
Defendants,
By CHAS. C. BULKLEY
DAVID B. GANN
GEORGE H. PEAKS,
Their Solicitors.

CHAS. C. BULKLEY
DAVID B. GANN
GEORGE H. PEAKS
Solrs. for said defendants.

* . * . * . *

INTERROGATORIES.

(Filed February 2, 1916.)

Interrogatories to be answered under oath by the officer or agent of the plaintiff corporation designated by the Court or Judge thereof, under the provisions of Rule 58 of the Rules of Practice for the Courts of Equity of the United States, promulgated by the Supreme Court of the United States:

(1) Upon which of the several patents set up in the Bill of Complaint as amended does the plaintiff base its claim of infringement?

(2) Upon which claim or claims of plaintiff's patents, charged to be infringed, does the plaintiff base its claim of infringement?

(3) Describe and illustrate in detail the structure made and sold by defendants, charged as an infringement?

(4) Upon what act or acts of the defendant or of the several defendants does the plaintiff base its claim of infringement? (Answer to be fully and in detail.)

236 (5) When and where did such alleged acts or act of infringement occur?

(6) When did the plaintiff first learn of the infringement charged, and how and from whom?

(7) If your answer or answers to either or all of the foregoing interrogatories refer to, or are based wholly or in part upon any instrument or other writing, document or

record, attach a copy of such instrument, wiring, document or record, indicating the portion thereof referred to.

SUMTER ELECTRICAL COMPANY
SPLITDORF ELECTRIC COMPANY

Defendants

By CHAS. C. BULKLEY

DAVID B. GANN

GEORGE H. PEAKS

Their Solicitors.

CHAS. C. BULKLEY

DAVID B. GANN

GEORGE H. PEAKS

Solicitors for said Defendants.

237 ANSWERS OF S. A. LOEB, SECRETARY OF THE WEBSTER ELECTRIC COMPANY, PLAINTIFF, TO THE INTERROGATORIES HERETOFORE FILED BY THE CORPORATION DEFENDANTS.

FILED
1

(Filed February 18, 1916)

State of Wisconsin }
County of Racine } ss:

S. A. LOEB, being first duly sworn, deposes and says that he is the Secretary of the Webster Electric Company, plaintiff, and in answer to the interrogatories heretofore filed herein by the corporation defendants says as follows:

Interrogatory No. 1. Upon which of the several patents set up in the Bill of Complaint as amended does the plaintiff base its claim of Infringement?

Answer. Past infringement of Letters Patent No. 1,101,956 and Reissue Letters Patent 13,878, and threatened infringement of these and the remaining patents in suit.

Interrogatory No. 2. Upon which claim or claims of plaintiff's patents, charged to be infringed, does the plaintiff base its claim of infringement?

Answer. As to the defendants' past infringing acts 238 so far as the plaintiff is informed thereon on Claims 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, and 14 of patent No. 1,101,956, and Claims 13, 14, 15, 19, 20, 21, 22, 23, and 24 of Reissue Patent No. 13,878.

Interrogatory No. 3. Describe and illustrate in detail the

structure made and sold by defendants, charged as an infringement?

Answer. In ignition apparatus made, used, and sold by the defendants and comprising a block or body arranged to be fitted into an aperture in the wall of an internal combustion engine. Carried by and mounted in said block or body are relatively fixed and movable electrodes. Formed integral with the block or body aforesaid is a laterally extending shelf upon which is mounted an electric current generator consisting of stationary field magnets and a rotor movable with respect to the field magnets. Means in the form of two relatively strong springs normally retain the generator rotor in a certain or pre-determined position. Fixed with respect to the rotor or oscillatory part of the mechanism is an arm adapted to be engaged by an engine driven actuating device and by the latter to be moved to a certain position and there released, whereupon the springs before mentioned quickly move the oscillatory part of the mechanism toward normal position and operate the current generator to produce an ignition current. Fixed with respect to the arm last mentioned is a second arm which serves to actuate the movable electrodes when the oscillatory part of the mechanism is moved by the springs, as before explained. The movable electrode has fixed with respect thereto an arm provided with an adjustable screw arranged to be struck to separate the electrodes. Associated with the movable electrode is a spring of less tension than the springs which normally tend to hold the oscillatory part of the mechanism in normal position. The spring associated with the movable electrode tends to keep the fixed and movable electrodes in engagement one with the other, and 239 also tends to move the arm on the movable electrode toward that arm on the oscillatory part of the mechanism which in the operation of the mechanism strikes the electrode arm to effect the separation of the electrodes.

In connection with some, if not all, of the infringing apparatus heretofore made, used, and sold by the defendants is a so-called starting lever arranged to be fulcrumed on a stationary part of the apparatus and arranged when actuated to move the oscillatory part of the mechanism against the action of the springs associated therewith and then to release the rotor in a manner similar to that in which the rotor is arranged to be actuated and released by the engine driven actuating device.

One form of the apparatus charged as an infringement is

the so-called "Sumter Plugoscillator" illustrated in the attached pamphlet. The apparatus shown in the pamphlet is provided with all of the features previously referred to in the present answer. The pamphlet mentioned has been marked for identification "Exhibit A—Plaintiff's Answers to Defendants' Interrogatories".

Interrogatory No. 4. Upon what act or acts of the defendant or of the several defendants does the plaintiff base its claim of infringement? (Answer to be given fully and in detail.)

Answer. The making, assembling, using, and selling of apparatus embodying all or some of the features of construction described in the answer to Interrogatory No. 3, some of which apparatus has been sold under the name "Sumter Plugoscillator", and the aiding and encouraging of said acts.

Interrogatory No. 5. When and where did such alleged acts or act of infringement occur?

Answer. In Chicago, Cook County, Illinois; Sumter, South Carolina; and divers other places in the United States since the dates on which said patents were granted and both prior to and since the commencement of this suit.

240 Interrogatory No. 6. When did the plaintiff first learn of the infringement charged, and how and from whom?

Answer. Shortly after the grant of the reissue patent No. 13,878 plaintiff was informed that the defendant, Sumter Electrical Company was infringing, or was about to infringe, said patent, and suit was brought against said Sumter Electrical Company promptly after sufficient information of its infringement was acquired. Shortly after the institution of the suit aforesaid the plaintiff learned that reissue patent No. 13,878 and patent No. 1,101,956 were being infringed by all of the defendants. All of this information was acquired by the plaintiff through the usual channels afforded by the trade and from the defendants herein.

Interrogatory No. 7. If your answer or answers to either or all of the foregoing interrogatories refer to, or are based wholly or in part upon any instrument or other writing, document or record, attach a copy of such instrument, writing document or record, indicating the portion thereof referred to.

Answer. The pamphlet referred to in the answer to Interrogatory No. 3 has been attached hereto and properly identified.

S. A. LOEB.

174 *Amendment to Answer of Splitdorf Electrical Co.*

Subscribed and sworn to before me this 17 day of February, A. D. 1916.

JAMES N. BAUR
Notary Public.

241 AMENDMENT TO ANSWER OF SPLITDORF ELECTRICAL COMPANY, ONE OF THE DEFENDANTS IN THE ABOVE ENTITLED SUIT.

(Filed May 22, 1916)

Comes now the defendant, Splitdorf Electrical Company, and by leave of court first had and obtained, amends its answer heretofore filed as the joint and several answer of this, defendant and the Sumter Electrical Company, defendant, as heretofore amended, and also by way of setting forth and alleging material supplemental matter as follows:

Insert after Paragraph 32-a, heretofore added to the said answer by amendment, the following:

“(32-b) (1) This defendant further shows that on, to-wit: February 1, 1916, the defendant, Sumter Electrical Company, did, for a valuable consideration, in writing, sell, assign, transfer and set-over unto this defendant, its successors and assigns, all the right, title and interest of the said Sumter Electrical Company in and to the Letters Patent hereinbefore mentioned and referred to, including all claims or rights of whatsoever kind or nature arising out of past infringements of said Letters Patent, or any of them, to the full end of the terms of the said Letters Patent and of the Letters Patent which might be issued thereafter, for any reason,—and all re-issues, divisions, renewals or extensions thereof,—and that all such assignment was filed for record in the Patent Office of the United States on, to-wit: the 15th day of March, 1916, which said assignment, duly executed by the said defendant, Sumter Electrical Company, as aforesaid, this defendant stands ready to produce upon the hearing hereof or as it may be directed by this Honorable Court to do.”

“By virtue of said assignment, this defendant has succeeded to, and become the sole owner of, all right, title and interest of the said Sumter Electrical Company in the said Letters Patent, and contracts with reference thereto, heretofore enjoyed by this defendant and said Sumter Electrical Company jointly.”

“(2) That, as more fully appears by and from the license

agreement entered into between the two defendants Podlesak and the plaintiff,—a copy of which is attached to the Bill of Complaint as Exhibit 'D' thereto,—it was provided, among other things, that the said defendants, Podlesaks, did agree to and with the plaintiff that they, and each of them, would aid and assist each other in the prosecution of the applications therein referred to, and the obtaining of patents thereunder,

and in any interference proceeding relating to their right
242 of priority to said inventions, and any suit or proceeding brought under any of the said patents, or for the infringement of any patents, by reason of the manufacture, use or sale by the plaintiff of the inventions described in said patents or applications; provided, however, that said defendants Podlesak should not be called upon to pay out or expend any money in any suit or proceeding relating to the said inventions; and the said defendants Podlesak, moreover, did in and by said agreement appoint the attorney for the plaintiff (meaning Lynn A. Williams, Esq., the counsel for the plaintiff at that time and in this suit) as the agent and attorney of them, the said defendants Podlesak, for certain purposes, as will more fully appear by reference to said Exhibit 'D' to the Bill of Complaint, to which reference is hereby made."

"And this defendant says that the said Letters Patent and applications were the same as hereinbefore mentioned and involved herein, and which are the subject matter of this suit, and all right, title and interest of the said defendants Podlesak in which, and each and all thereof, has passed to this defendant by virtue of the contracts between the defendants Podlesak and this defendant and said Sumter Electrical Company, jointly, and by reason of the succession in interest of this defendant to all interest of the said Sumter Electrical Company, defendant, as aforesaid."

"And this defendant says that by reason of the premises the said plaintiff has become and is bound to aid and assist this defendant as the successor in interest of the said defendants Podlesak with respect to the matters and things aforesaid, and in and about any interference proceedings in the United States Patent Office or elsewhere, and in equity and good conscience ought so to do."

"But this defendant avers that, notwithstanding the privacy and interest of its express covenants and the obligations thereof aforesaid, and in violation thereof, the said plaintiff has, since the filing of the original Bill of Complaint herein, failed and refused to aid and assist this plaintiff with re-

spect to the matters and things aforesaid, in the following particulars, among others, to-wit:—

“That it appears from the complaint herein that on February 9, 1915, a certain Re-issue Letters Patent No. 13878 was granted to Emil Tesla Podlesak for an improvement in Current Generators and Igniters for Internal Combustion Engines, which contained, among others, claims designated as claims 13, 14, 15, 19, 20, 211, 22, 23, 24; that it appears from the complaint herein, and from the answers to the interrogatories of the defendant by the plaintiff, that the defendant is charged with the infringement of the said Re-Issue Patent in respect of the claims as hereinbefore set forth and no others, and said complaint alleges that said claim are valid to the patentee, Emil Tesla Podlesak, and in full force and effect;”

“That on the 2d day of February, 1910, one Edmund Joseph Kane filed in the United States Patent Office a certain application for United States Letters Patent for improvement in Electric Igniters for Explosive Engines, Serial No. 541428; that, as this defendant is informed and believes, the said Kane was, prior to, at the time of, and subsequent to the 243 filing of the said application, in the employ of the plaintiff, and that the said Kane offered to sell to the plaintiff herein the invention described and illustrated in said application, and also any patent or patents which might be granted thereon; that after said application had been pending in the Patent Office for about five years, to-wit: on the 14th day of January, 1915, the said Kane filed a divisional application of said original application, in which he embodied the identical claims of the Podlesak Re-Issue Patent involved herein and hereinbefore set forth; that on the 29th day of October, 1915, the United States Patent Office declared an interference, No. 39181, between the said divisional application of Kane and the said Re-Issue Patent of Podlesak, in which the counts of the issue involved are the claims as hereinbefore enumerated; that thereupon the said Podlesak, the patentee, moved to dissolve the said interference in accordance with the rules of practice of the Patent Office in such cases made and provided, on the ground, among others, that neither the original application of said Kane, nor his divisional application illustrated and described any invention, structure or subject matter which was covered, embodied in or described by the said claims as aforesaid, contained in the said Re-Issue Patent of the said Podlesak, and that, therefore, the said Kane had no right to make such

claims in his application, nor to prosecute an interference to determine priority of invention thereon; that said question involved upon such motion to dissolve is still pending in and undetermined by the Patent Office;"

"That on the 4th day of May, 1916, the plaintiff, by an assignment in writing, duly recorded in the United States Patent Office, became the owner of the entire right, title and interest in and to the said divisional and original applications of the said Kane and of any and all inventions described and illustrated and claimed, or which might be claimed, therein."

"Defendant further alleges that at or about the time of acquiring the entire right, title and interest aforesaid, as defendant is informed and verily believes, one Lynn A. Williams, as attorney for, and in behalf of, the plaintiff, instructed or directed the attorneys for the said Kane divisional application to move the Patent Office to advance the hearing before the Patent Office on the motion to dissolve the same made in behalf of Podlesak; and defendant alleges, upon information and belief, that the plaintiff proposes to and will, through its attorney, prosecute said interference in the Patent Office in behalf of the said Kane application, with the end and purpose in view of obtaining a judgment by the Patent Office that the said Kane was the first, sole and original inventor of the subject matter set forth in the claims hereinbefore recited, and that the said claims contained in the said Podlesak Re-Issue Patent are void and of no force and effect."

"That the said divisional application of Kane, filed January 14, 1915, now owned by the plaintiff, after due action, was, on May 24, 1915, placed in interference with the patent of Milton, No. 1096048, of May 12, 1914, then and now owned by the plaintiff, which said interference is now pending and as yet undecided by the Patent Office."

"That the said Kane divisional application, which was placed in interference with said Podlesak Re-Issue Patent, was held by the Patent Office to date back to the prior application of said Kane, filed February 2, 1910, which is still pending in the Patent Office and stands under rejection, and which contained no claims like those in interference with the said Milton or the said Podlesak. Such prior application having been held by the Patent Office to disclose the subject matter of the Podlesak claims, the question as to whether
244 Kane really was the original, first and sole inventor of the subject matter of the invention in controversy between

the parties in the Patent Office is not open to attack by the party Podlesak in the Patent Office,—since it appears from a preliminary statement of said Podlesak, filed by him in accordance with the rules of the Patent Office, that he, the said Podlesak, did not make said invention prior to the date of the filing of said application by the said Kane; that, therefore, on the record dates of the respective applications, judgment of priority in favor of Kane has been rendered by the Examiner of Interference, the first tribunal of the Patent Office to pass upon interference questions from which decision appeal has been taken, and such appeal is now pending before the Board of Examiners in Chief of the Patent Office; that under the practice of the Patent Office, and in view of the ruling of the Patent Office that the original application of Edmund Joseph Kane, which was filed February 2, 1910, Serial No. 541426, discloses the subject matter of the divisional application of Kane, which is in interference with both Podlesak and Milton, the only question open to Podlesak before the various tribunals of the Patent Office is the right of Kane to make the interfering claims, and defendant further alleges that the Patent Office has ruled that if the Kane-Milton interference be finally decided in favor of Milton, the decision in favor of Kane in the Kane-Podlesak interference shall be set aside; that during the proceedings in the Patent Office, after the Milton-Kane interference was declared, and while the attorneys for Kane were seeking to have his application placed in interference with the Podlesak Re-Issue Patent, one of the grounds for the hastening of the interference between Kane and Podlesak and delaying the Milton-Kane interference was that the parties in connection with the Milton and Podlesak patents were identical,—that is, they were both by the plaintiff, the Webster Electric Company—that is, that at that time the point was made by Kane that he, as a single party, was conducting, or about to conduct, a contest in two different interferences against two parties whose interests were identical,—the Milton patent being actually owned by the Webster Electric Company and the Podlesak patent being jointly controlled by the Webster Electric Company and the Splitdorf Electrical Company.”

“That on May 4, 1916, as hereinbefore set forth, there was filed for record in the United States Patent Office an assignment of the full right, title and interest in the Kane application, both parent and divisional, to the plaintiff herein. It,

therefore, appears that the Milton-Kane interference is now pending between two nominal parties whose interests are owned by the same assignee (the Webster Electric Company), and that the Kane-Podlesak interference is now in substantially the same category—the Podlesak patent being one in which the Webster Electric Company is jointly interested with the Splitdorf Electrical Company.”

“It is, therefore, alleged by this defendant that the Milton patent, being owned by the plaintiff herein, and the Kane application also being owned by said plaintiff, it is impossible for the defendants herein to preserve their rights in connection with the Podlesak-Kane interference, and that, in the nature of things, the plaintiff owing both the Milton patent and the Kane application, can so adjust matters that while their rights be fully preserved, the ruling of the Patent Office to the effect that if priority of invention in the Milton-Kane interference be finally awarded to Milton, Podlesak can move to set aside any judgment that might be rendered in favor of Kane and the interference Kane v. Podlesak will be of no effect, as the parties can so manipulate the Milton-Kane interference as that Podlesak would not receive any benefits 245 that would otherwise accrue from a judgment of priority in favor of Milton in the Milton-Kane interference.”

“Further, this defendant is informed and believes that the attorneys for said Kane prosecuting the interference proceeding in the United States Patent Office aforesaid, are so doing at present under the advice and direction of Lynn A. Williams, Esq., of counsel for plaintiff herein, and for the benefit of and on behalf of said plaintiff.”

“And this defendant, therefore, prays that the plaintiff, its privies, agents and attorneys, be enjoined and restrained by a decree of this court, and by an interlocutory order pending the entry of such decree, from directly or indirectly asserting or claiming in the Patent Office, or elsewhere, any matter, thing or cause whatsoever inconsistent with, or in derogation of, the validity of said Podlesak inventions, applications and patents.”

“And this defendant further prays that as to any interest or right which the said plaintiff may have or shall hereafter acquire, in and to the asserted or claimed invention and application of said Kane, or any right or interest the said plaintiff has acquired, or may hereafter acquire, in and to any invention or application, or patent, inconsistent with, or in deroga-

tion of, the validity of the patents, inventions or applications aforesaid of the said Podlesaks, and of this defendant as their successor in interest, that the said plaintiff may be held and decreed to have acquired the same in performance of its agreement, covenant and obligation aforesaid, and for the benefit and advantage of this defendant as well as itself; and for such other and further relief in the premises as may be deemed just and equitable."

The answer of the plaintiff under oath to the matters and things set forth in the foregoing amendment, and all thereof, is hereby expressly waived.

SPLITDORF ELECTRICAL COMPANY

By CARLOS W. CURTIS

Its General Manager.

CHARLES C. BULKLEY

DAVID B. GANN

GEORGE H. PEAKS

Solicitors for said Defendant, Splitdorf Electrical Company, and of counsel.

May 9, 1916.

* * * *

12. 246 PLAINTIFF'S ANSWER TO THE AMENDMENT IN THE NATURE OF A CROSS BILL TO THE ANSWER OF DEFENDANT SPLITDORF ELECTRICAL COMPANY.

(Filed June 12, 1916)

Plaintiff for answer to the amendment filed on or about May 22, 1916, to the answer of Splitdorf Electrical Company says:

1. Plaintiff has no knowledge concerning the matters averred in subdivision (32-B) (1) in the first and second paragraphs thereof, and, therefore, calls on defendant for strict proof thereof.

2. Plaintiff submits for the interpretation and decision of the Court the agreement "Exhibit D" attached to the Bill of Complaint, and so far as the averments in subdivision (32-B) (2), first paragraph thereof, may be in conflict with the provisions of said agreement plaintiff denies the same.

3. Referring to subdivision (32-B) (2), second paragraph thereof, plaintiff admits that the patents and applications re-

ferred to in said contract "Exhibit D" form part of the subject matter of this suit, but plaintiff denies, on information and belief, that all right, title, and interest of the defendants Podlesak in said patents has passed to defendant Splitdorf Electrical Company.

4. Referring to subdivision (32-B) (2), paragraphs 3 and 4 thereof, plaintiff denies that in any manner whatsoever or by reason of any agreement or fact whatsoever it ever became or is bound in any way to assist the defendants Podlesak or the Splitdorf Electrical Company in any interference proceedings in the United States Patent Office or otherwise; and, therefore, denies that it has ever at any time violated any covenant or obligation to Splitdorf Electrical Company as averred in said paragraphs, or otherwise.

5. Plaintiff admits the matters averred in subdivision (32-B) (2) paragraph 5 thereof.

6. Plaintiff admits the matters averred in subdivision (32-b) (2), paragraphs 6, 7, and 8 thereof, except that it denies that said Edmund Joseph Kane offered to sell the plaintiff the invention set forth in said application and any patents which might be granted thereon until some months subsequent to the filing of the Bill of Complaint herein, and also denies that it has prosecuted said Kane application, or otherwise acted, with the purpose of obtaining any judgment that the said claims of the Podlesak reissue patent are void and of no force and effect. Plaintiff says that some time subsequent to the filing of the Bill of Complaint herein its officers learned that said Kane had filed an application in the United States Patent Office by which he claimed to be the prior inventor of the invention set forth in Claims 13, 14, 15, 19, 20, 21, 22, 23 and 24 of said Podlesak reissue patent No. 13,878, and that subsequent to the filing of the Bill of Complaint herein plaintiff was notified on behalf of said Kane that plaintiff was acting at its peril in building machines and devices that might be held to be an infringement of the claims in said Kane applications which he intended to prosecute to the end. Plaintiff immediately caused to be made a thorough investigation of the facts relating to the alleged inventions of said Podlesak and said Kane and as a result of said investigation it was determined that said Podlesak was not the prior inventor of the invention set forth in the above mentioned claims of said reissue patent, Podlesak's title to which was warranted to plaintiff by said contract "Exhibit D", but that said Kane was the true and prior inventor of said invention. Plaintiff there-

upon, on or about May 4, 1916, acquired from said Kane by the payment of many thousands of dollars the entire right, title and interest in and to said original and divisional 248 applications and the inventions set forth therein. Plaintiff says that its counsel herein are in its behalf prosecuting said Kane application in said interference with the Podlesak reissue patent and that the Power of Attorney of said counsel has been filed in and accepted by the Patent Office.

7. Plaintiff admits the matter averred in subdivision (32-B) (2), paragraph 9 thereof, and admits the matters averred in paragraph 10 thereof, except that plaintiff denies that said prior Kane application, filed February 2, 1910, contained no claims like those in interference with said Milton patent or said Podlesak patent and denies that the Patent Office has ruled that if the Kane-Milton Interference be decided in favor of Milton the decision in favor of Kane in the Kane-Podlesak Interference shall be set aside. Plaintiff says that the Commissioner of Patents, in denying a certain petition by Podlesak in the Kane-Podlesak Interference, merely ruled that the denial was without prejudice to Podlesak's right to move to set aside any judgment of priority that might thereafter be rendered in favor of Kane if priority of invention was finally awarded to Milton in the Milton-Kane Interference. Plaintiff says that the Patent Office records in the Milton-Kane Interference and in the Podlesak-Kane Interference disclose, and Podlesak admits, that Podlesak's alleged invention set forth in the above mentioned claims of said reissue patent was not made until long after the Kane application was filed and also long after the application for the Milton patent involved in the Milton-Kane Interference was filed. Plaintiff, therefore, says that the records disclose, and Podlesak admits, that Podlesak is under no circumstances the true and prior inventor of said invention and is entitled to no rights in the same. Plaintiff further says that in the Podlesak-Kane Interference Podlesak is not making and can not make any contention that he was the prior inventor of said invention and that the sole question involved in said interference is whether or not Kane has the right, technically, to make the above mentioned claims of the Podlesak reissue patent. The Law Examiner of the Patent Office has decided 249 that Kane has the right to make these claims and the Examiner of Interferences thereafter awarded priority of invention to Kane. An appeal from the decision of the

Examiner of Interferences has been argued and submitted to the Board of Examiners in Chief and is now pending their decision. Plaintiff, before the submission of said appeal, moved the Board of Examiners in Chief on behalf of Kane to advance the hearing thereof on the ground that this suit for infringement of plaintiff's rights under the Podlesak reissue patent was pending and that plaintiff could not consistently proceed further with this suit until it was determined by the Patent Office whether Kane or Podlesak was the true and prior inventor of the invention set forth in said claims in interference. Plaintiff avers on information and belief that Podlesak is prosecuting and intends to prosecute a series of appeals in the Kane-Podlesak interference in the Patent Office and in the Court of Appeals of the District of Columbia for the purpose of delaying the issuance of a patent to plaintiff for the Kane invention and of thus preventing plaintiff from taking such action in this suit as a final determination of the Kane-Podlesak Interference may make proper.

8. Referring to subdivision (32-B) (2) paragraphs 11, 12 and 13 thereof, plaintiff admits that it owns and controls the Milton patent and the Kane applications involved in the Milton-Kane Interference, but denies that the Kane-Podlesak Interference is in substantially the same category. Plaintiff says that its counsel are openly prosecuting the Kane applications involved in both of said interferences. Plaintiff avers that the defendants Podlesak and said defendant Splitdorf Electrical Company, claiming to be the sole owners of the Podlesak reissue patent, have continuously maintained and now maintain that plaintiff has no right to take any action whatever with respect to said Podlesak reissue patent in said Kane-Podlesak Interference, and plaintiff has had no authority in the Patent Office to take any action with respect to said Podlesak reissue patent and has taken no such action.

Plaintiff denies that it can in any way whatsoever ad-
250 just matters in the Milton-Kane Interference as to in any way affect the Podlesak-Kane Interference and says that the Milton-Kane Interference can only be determined according to the true facts occurring some years ago and over which plaintiff had and has no control. Plaintiff further says that any judgment in the Milton-Kane Interference, whichever of said parties may thereby be determined to be the prior inventor, can give no right whatsoever to Podlesak in the Podlesak-Kane Interference or otherwise, because Podlesak has admitted that both Kane and Milton invented the de-

VICES disclosed respectively in the Milton patent and the Kane applications long prior to Podlesak's alleged invention.

9. Plaintiff therefore denies that defendant Splitdorf Electrical Company is entitled to the relief prayed for in subdivision (32-B) (2) paragraphs 14 and 15 thereof, of its amendment to the answer or to any other relief whatsoever; and plaintiff therefore prays that the amendment to the answer set forth in subdivision (32-B) (1) and (2) be dismissed at defendants' costs.

WEBSTER ELECTRIC COMPANY,

By LYNN A. WILLIAMS

WILLIAMS, BRADBURY & SEE

LEVINSON, BECKER, CLEVELAND &
SCHWARTZ

Plaintiff's Counsel

* * * * *

5. 251 ORIGINAL BILL IN THE NATURE OF A SUPPLEMENTAL BILL

(Filed October 25, 1918.)

To the Honorable Judges of the District Court of the United States in and for the Northern District of Illinois, Eastern Division, in Chancery Sitting:

Webster Electric Company, a corporation organized, chartered, and existing under and by virtue of the laws of the State of Wisconsin, having its principal place of business at Racine, in the County of Racine and State of Wisconsin, and a citizen of the State of Wisconsin (hereinafter called Webster Electric Company of Wisconsin), brings this its original Bill in the nature of a Supplemental Bill, against Henry Joseph Podlesak, residing at Chicago, Illinois, a citizen of Illinois and a resident of the Eastern Division of the northern District of Illinois, Tesla Emil Podlesak, residing at Racine, Wisconsin, a citizen of Wisconsin have a regular and established place of business at Chicago, Illinois, within the 252 Eastern Division of the Northern District of Illinois, within which division and district he has committed acts of infringement of plaintiff's patents hereinafter complained of, Sumter Electrical Company, a corporation organized, chartered and existing under and by virtue of the laws of the

State of South Carolina, and Splitdorf Electric Company, a corporation organized, chartered and existing under and by virtue of the laws of the State of New Jersey, both of which said corporations have regularly established places for doing business and duly appointed authorized agents or officers located in the City of Chicago, State of Illinois, in this division and district, within which district and division both of said corporations have committed acts of infringement of plaintiff's patents hereinafter complained of, and complains and shows:

I.

That therefore, on or about the 12th day of October, 1915, Webster Electric Company, a corporation organized, chartered and existing under and by virtue of the laws of the State of West Virginia, having its principal place of business at Racine, in the County of Racine and State of Wisconsin and a citizen of the State of West Virginia (hereinafter called Webster Electric Company of West Virginia), brought and duly filed its original Bill of Complaint in this Honorable Court against each and all of the aforesaid defendants, Equity No. 553, in which said Webster Electric Company of West Virginia complained and showed and alleged certain matters and things, which are more fully and particularly set forth in the said original Bill of Complaint of the said Webster Electric Company of West Virginia, and all of which said complaints, showings and allegations are adopted and accepted by your orator and made a part hereof, and complained of, shown and alleged by your orator as fully and to the same extent and in the same manner and for the same purpose as though repeated, reiterated, and incorporated herein in extenso, and in which said Webster Electric Company of West Virginia prayed for certain relief, which prayer for relief is adopted and accepted by your orator and made a part hereof, and 253 prayed for by your orator as fully and to the same extent and in the same manner and for the same purpose as though repeated, reiterated and incorporated herein in extenso, reference to the said original Bill being hereby made and reliance upon the said original Bill being hereby had the same as if the matter alleged and prayed for in the said original Bill were set forth herein in full.

II.

And your orator further shows to your Honors that said above-named defendants were duly served with process or subpoena in said suit; that in due course all of the said defendants appeared and put in and filed their answers; that on or about the 18th day of November, 1915, Webster Electric Company of West Virginia, plaintiff in the aforesaid suit, by leave of court granted on or about the 11th day of November, 1915, amended its Bill of Complaint; that on or about the second day of February, 1916, the aforesaid defendants Sumter Electrical Company and Splitdorf Electric Company filed an amendment to their joint and several answer theretofore filed; that on or about the second day of February, 1916, the said defendants Sumter Electrical Company and Splitdorf Electric Company filed certain interrogatories to be answered under oath by an officer or agent of the then plaintiff corporation; that on or about the 17th day of February, 1916, the then plaintiff, Webster Electric Company of West Virginia, filed the answers under oath of S. A. Loeb, then Secretary of the said Webster Electric Company of West Virginia to the aforesaid interrogatories; that on or about the 22nd day of May, 1916, the aforesaid defendant Splitdorf Electric Company, by leave of court first had and obtained, amended its answer theretofore filed as the joint and several answer of the said defendant Splitdorf Electric Company and the aforesaid Sumter Electrical Company, which said amendment comprised in part a counter-claim against the aforesaid Webster Electric Company of West Virginia, and in which amended answer, and following and pursuant to the aforesaid counter-claim the said Splitdorf Electric Company, defendant, 254 prayed in substance that the aforesaid Webster Electric Company of West Virginia be enjoined and restrained from asserting any matter or cause inconsistent with or in derogation of the supremacy of the "Podlesak inventions, applications and patents" which constituted a part of the subject matter of the aforesaid suit and the pleadings therein, and in which said amended answer, and following and pursuant to the aforesaid counterclaim, the said Splitdorf Electric Company prayed in substance that any interest or right which the aforesaid Webster Electric Company of West Virginia might have or hereafter acquire in or to certain inventions and applications of one Edward Joseph Kane, particularly in and to an application for United States Letters Pat-

ent serial No. 2,097, filed on the 14th day of January, 1915, might be held and decreed to have been acquired by the said Webster Electric Company of West Virginia for the benefit and advantage of the said Splitdorf Electric Company; that on or about the 12th day of June, 1916, the said Webster Electric Company of West Virginia filed its answer to the amended answer of the said Splitdorf Electric Company containing the aforesaid counter-claim and prayer for affirmative relief; and that various other pleadings have been had in the aforesaid suit, and that various and sundry papers, documents, and exhibits have been filed with the Clerk of the Court and now form parts of the record of the proceedings had in and about the aforesaid suit, all of which said pleadings, papers, documents, and exhibits your orator hereby shows and alleges as constituting the proceedings heretofore had in the aforesaid suit, as fully as though they were set out and restated in extenso herein, and reference to all of which said pleadings, papers, documents and exhibits filed and of record in the aforesaid suit is hereby made, the same as if the same were set forth herein in full.

III.

And your orator further shows unto your Honors that on or about the 12th day of March, 1918, the said Webster Electric Company of West Virginia, in consideration of the sum of One Dollar and other good and valuable consideration, by a written instrument dated the 12th day of March, 1918, 255 which said instrument was duly filed for record and recorded in the United States Patent Office on or about the first day of July, 1918, bargained, sold, granted, transferred, assigned and conveyed unto your orator, the said Webster Electric Company of Wisconsin, all the property, property rights, business and assets belonging to the said Webster Electric Company of West Virginia, or in which the said Webster Electric Company of West Virginia was interested, including all its copyrights, trade rights, trade names, patents, patent rights, devices and inventions of every kind and character owned by or in which the said Webster Electric Company of West Virginia had any interest whatsoever, and including any and all interest in or to and any or all benefits and any and all claims and rights of action past or future arising out of any and all of the following contracts, among others, to-wit:

A "License Agreement between Webster Electric Company of West Virginia and Emil Podlesak and Henry Joseph Podlesak, dated February 5, 1914, relating to United States Letters Patent numbered 947,647, 948,483 and 1,003,649;

A "License Agreement (Shopright)" between Webster Electric Company of West Virginia and Emil Podlesak and Henry Joseph Podlesak, dated February 5, 1914, relating to United States Letters Patent numbered 1,022,642, 1,055,076 (reissue No. 13,878), 1,056,360, and pending applications for United States Letters Patent serial No. 734,143 (since issued as patent No. 1,101,956), serial No. 668,153 (since issued as patent No. 1,098,754) and serial No. 639,738 (since issued as patent No. 1,098,052);

A "Supplemental Agreement" between Webster Electric Company of West Virginia and Emil Podlesak and Henry Joseph Podlesak, dated January 20, 1915, relating to United States Letters Patent No. 947,647, 948,483, 1,003,649, 1,022,642, 1,055,076 (reissue No. 13,878) 1,056,360, 1,101,956, 1,098,052, and 1,098,754;

each and all of which said agreements are set out in the original Bill of Complaint filed by the said Webster Electric Company of West Virginia against the aforesaid defendants and which said agreements and certain of which said trade rights, trade names, patents, patent rights and inventions, and claims and rights of action, constituted the subject matter of the aforesaid original Bill of Complaint and the aforesaid suit of the said Webster Electric Company of West Virginia against the aforesaid defendants, and in and by the same instrument bargained, sold, granted, transferred, assigned and conveyed unto your orator, the said Webster Electric Company of Wisconsin, all iron, steel, copper, magnetos, goods, wares, merchandise, furniture, fixtures, machinery, raw materials of all kinds, materials and goods in process of manufacture, patterns, tools, and equipment; also all causes of action, claims, rights, and demands, either in law or in equity; also all orders on hand and all contracts entered into by the said Webster Electric Company of West Virginia and relating to the business theretofore carried on by the said Webster Electric Company of West Virginia; and also all real estate and buildings owned by the said Webster Electric Company of West Virginia and located in the City of Racine, State of Wisconsin, or elsewhere, together with all other property, property rights, and assets, tangible or intangible, of every kind, nature and description whatsoever and wherever located, in-

cluding the good will of the business theretofore carried on by the said Webster Electric Company of West Virginia, the said Webster Electric Company of West Virginia intending to and thereby transferring to the said Webster Electric Company of Wisconsin and vesting in the said Webster Electric Company of Wisconsin the legal ownership of the entire assets of the said Webster Electric Company of West Virginia, the said bargain, sale, grant, transfer, assignment and conveyance from the said Webster Electric Company of West Virginia to the said Webster Electric Company of Wisconsin being subject to any and all obligations arising from any contracts hereinabove mentioned, all of which said contracts the said Webster Electric Company of Wisconsin did thereby assume and agree to perform, and being subject also to all liens, encumbrances, debts and liabilities, direct, contingent and otherwise, against the said Webster Electric Company of West Virginia, either then in existence or which might at any time thereafter be asserted against said Webster Electric Company of West Virginia, all of which said liens, encumbrances, debts and liabilities the said Electric Company 257 of Wisconsin, then and there assumed and thereby agreed to pay and discharge;

Whereby the said Webster Electric Company of Wisconsin acquired all of the right, title and interest which the said Webster Electric Company of West Virginia had theretofore had, in all of the complaints, claims, demands, and remedies of the said Webster Electric Company of West Virginia, as alleged and prayed for in the aforesaid original Bill of Complaint filed by the said Webster Electric Company of West Virginia and the amendment thereto, and assumed and became liable for all of the obligations admitted by it in the pleadings or proceedings in or about the aforesaid suit, and to the same extent as was the said Webster Electric Company of West Virginia, but no further, the said Webster Electric Company of Wisconsin assumed and became liable for the obligations and claims and demands asserted against the said Webster Electric Company of West Virginia in and by the pleadings in the aforesaid suit of the said Webster Electric Company of West Virginia against the aforesaid defendants.

IV.

And your orator further shows unto your Honors that on or about the 12th day of March, 1918, the said Webster Electric Company of West Virginia, in consideration of One Dollar to it paid, and for other good and valuable consideration,

by a written instrument dated the 12th day of March, 1918, which said instrument was duly filed for record and recorded in the United States Patent Office on or about the 28th day of March, 1918, sold, assigned and transferred unto your orator, the said Webster Electric Company of Wisconsin, the whole right, title and interest in and to the invention disclosed in the application for United States Letters Patent for an improvement in Electric Igniters, filed by Edmund Joseph Kane January 14, 1915, serial No. 2097, together with all the rights and privileges under the Letters Patent that might be granted therefor, and the Commissioner of Patents was in and by said written instrument authorized and requested to issue the said patent to the said Webster Electric Company of Wisconsin; and

258 That on the 24th day of September, 1918, United States Letters Patent No. 1,280,105 were granted by the Commissioner of Patents to the said Webster Electric Company of Wisconsin, upon and as the result of the aforesaid application of Edmund Joseph Kane, filed January 14, 1915, serial No. 2097; and

That the said Webster Electric Company of Wisconsin is now possessed of the whole right, title and interest in and to the aforesaid Letters Patent No. 1,280,105, granted September 24, 1918.

V.

And your orator further shows unto your Honors that on or about the 31st day of May, 1918, by due and lawful proceedings had, the said Webster Electric Company of West Virginia was duly dissolved, its charter canceled or revoked, and its corporate existence ended.

VI.

To the end, therefore, that the defendants may, if they can, show why your orator should not have the relief hereby prayed, and may, according to the best and utmost of their several and respective knowledge, remembrance, information and belief, full, true and direct answer make to the allegations of the bill, but not under oath, an answer under oath being expressly waived, your orator prays that the plaintiff, Webster Electric Company of Wisconsin, may be substituted for and stand in the place of the said Webster Electric Company of West Virginia, the plaintiff in the aforesaid original suit, and that it may have the benefit of said suit and of the orders and proceedings therein, and that this its bill be taken as sup-

plemental to said original bill, and that the plaintiff be granted the relief prayed for in said original bill in all respects as though the original bill had been filed by this plaintiff, reference to which said original bill is hereby made the same as though the same had been set forth herein in full, and the prayer for relief in which is hereby reiterated herein in full, and for such other and further additional relief as to the court may seem just and proper in the premises.

259

VII.

And your orator further shows unto your Honors that the defendants Splitdorf Electric Company and Sumter Electrical Company, having filed their joint and several answer herein to the bill of complaint of the said Webster Electric Company of West Virginia on or about the 14th of December, 1915, and the defendant Splitdorf Electric Company having, on or about the 22nd day of May, 1916, filed an amendment to its answer, which said amendment was in the nature of a cross bill or counter claim wherein, as appears more fully from said amended answer in the nature of a cross bill or counter claim, to which reference is hereby made, and which said answer set forth in detail that said Webster Electric Company of West Virginia, after the filing of its bill of complaint herein, had become the owner of a certain application for United States Letters Patent filed by Edmund Joseph Kane, Serial No. 2097, then pending before the Commissioner of Patents, and prayed in substance that said Webster Electric Company of West Virginia be decreed to hold said patent application, or any patent that might issue as a result thereof, in trust and for the benefit of the defendant Splitdorf Electric Company; and the said Webster Electric Company of West Virginia having filed on or about June 12, 1916 its answer to the amended answer of the said Splitdorf Electric Company in the nature of a cross bill or counter claim, and the aforesaid United States Letters Patent No. 1,280,105 having resulted from the aforesaid application of the said Edmund Joseph Kane and having issued to the said Webster Electric Company of Wisconsin on or about September 24, 1918, and since the filing of said answer of the said Webster Electric Company of West Virginia to the said answer of the said Splitdorf Electric Company in the nature of a cross bill or counter claim, your orator, the Webster Electric Company of Wisconsin, prepared a supplemental answer to said answer to the amended answer of said Splitdorf Electric Company in the nature of a cross bill or counter claim, which supplemental

answer the said Webster Electric Company of Wisconsin, upon notice and motion duly made, prayed leave of this court to file herein on the 18th day of October, 1918, but the court, upon the objection of the solicitors for the defendant Splitdorf Electric Company, refused to allow your orator to file such supplemental answer, but entered an order granting leave to your orator to include in this its original bill in the nature of a supplemental bill the allegations and prayer for relief contained and set forth in the said supplemental answer. Wherefore, your orator now shows in this its original bill in the nature of a supplemental bill the following facts:—

VIII.

That the interference No. 39,013 which was declared on or about August 24, 1915 between the divisional application of Kane filed January 14, 1915, Serial No. 2097 and Patent No. 1,096,048 of May 12, 1914 to John Lewis Milton was duly prosecuted in the United States Patent Office and before the Commissioner of Patents; that full and complete proofs were taken on behalf of both parties to the said interference No. 39,013, which proofs were duly filed in the United States Patent Office, whereupon a hearing before the Examiner of Interferences of the United States Patent Office was had upon said proofs, and whereupon, on or about the 30th day of March, 1917, the said Examiner of Interferences rendered and entered judgment awarding priority of invention of the subject matter in issue in the said interference to Edmund Joseph Kane.

IX.

That interference No. 39,181, which was declared by the United States Patent Office on the 29th day of October, 1915 between the divisional application of Kane, Serial No. 2097, filed January 14, 1915, and reissue patent No. 13,878 to Podlesak, was duly prosecuted in the United States Patent Office both before and from and after May 22, 1916 by the attorneys for the Webster Electric Company of Wisconsin and by the attorneys for the Webster Electric Company of West Virginia, the predecessor of the Webster Electric Company of Wisconsin, on behalf of Kane, and by attorneys selected and appointed by the defendant Splitdorf Electric Company on behalf of Podlesak.

That the Examiner of Interferences in the United States Patent Office, having awarded priority of invention to Kane,

an appeal was taken on behalf of Podlesak to the Board of Examiners in Chief of the United States Patent Office, before whom a hearing was had, and which Board of Examiners in Chief, in due course, rendered a decision awarding priority of invention of the subject matter of the said interference to Podlesak, whereupon an appeal was taken and had on behalf of Kane to the Commissioner of Patents in person, whereupon a hearing was had before the Commissioner of Patents, and whereupon in due course the Commissioner of Patents, rendered a decision awarding priority of invention of the subject matter of the said interference to Podlesak, whereupon an appeal was taken and had in behalf of Kane to the Court of Appeals of the District of Columbia, whereupon a hearing was had, and whereupon, on or about the 6th day of May, 1918, a decision was rendered by the said Court of Appeals of the District of Columbia, awarding priority of invention as to the claims constituting the issue and subject matter of the said interference to Podlesak, whereupon jurisdiction of the primary examiner of the Patent Office as to the Kane application Serial No. 2097 was restored and resumed, whereupon the said primary examiner rejected in the Kane application Serial No. 2097 each and all of the claims constituting the subject matter or issue of the said interference No. 39,181 between Kane and Podlesak, whereupon such proceedings were had that each and all the claims constituting the subject matter or issue of the said interference No. 39,181 between

Kane and Podlesak were cancelled from the said Kane application, and such that the said Kane application was on

August 27, 1918, formally allowed by the Commissioner of Patents with other and different claims, which claims did not and had not constituted the subject matter or issue of the said interference No. 39,181 between Kane and Podlesak, whereupon such proceedings were had that on September 24, 1918 United States Letters Patent No. 1,280,105 were duly granted and issued by the Commissioner of Patents to the said Webster Electric Company of Wisconsin upon the aforesaid application of Edmund Joseph Kane Serial No. 2097, filed January 14, 1915, as a division of Kane's application Serial No. 541,428 filed February 2, 1910, certain of the claims of the said Kane patent No. 1,280,105 being the claims which had constituted the subject matter or issue of the said interference No. 39,013.

X.

That interference No. 39,013, in which were involved the said Milton patent No. 1,096,048 and the Kane application serial No. 2097, is no longer pending, and that the said interference is and was long since terminated; and

That the said interference No. 39,181, in which were involved certain claims of the Podlesak reissue patent No. 13,878, and certain claims then pending in the Kane application serial No. 2097, is no longer pending; that the said interference is and was long since terminated; and that the claims constituting the issue of the said interference No. 39,181 are and were long since cancelled from the said Kane application serial No. 2097, and that the said Kane application No. 2097 is no longer pending before the Patent Office or the Commissioner of Patents; and the plaintiff denies that it did or could and that it can now or in the future so adjust matters that while the rights of the plaintiff or its predecessor be fully preserved the interference between Kane and Podlesak would be or will be of no effect, and denies that the plaintiff did or could or can now so manipulate the Milton-Kane interference as that Podlesak would not or will not receive any benefits which otherwise should accrue to him or those in privity with him.

263 The plaintiff denies that it has or is now or will in the future assert or claim in the Patent Office or elsewhere any matter, thing or cause whatsoever inconsistent with or in derogation of any patent or other right of the defendants Henry Joseph Podlesak or Tesla Emil Podlesak or either of them, or of any or all of the said defendants or others in privity with the said Podlesaks or either of them; and

The plaintiff denies that as to any interest or right which the said plaintiff may have or shall hereafter acquire in and to the invention or inventions or application or applications for Letters Patent of the said Kane, any such interest or right is or should be held or decreed to have been acquired or held in performance of any agreement, covenant or obligation with or to or for the benefit or advantage of the defendant Splitdorf Electric Company, in whole or in part, or for any of the defendants herein, either in whole or in part; and

The plaintiff denies that as to any right or interest which the plaintiff has acquired or now has or may hereafter acquire in and to any invention or application or patent, any such interest or right is inconsistent with or in derogation of the validity of any of the patents, inventions, or applications of the said Podlesaks or of the defendant Splitdorf Electric

Company or of any of the defendants, and denies that any such right or interest was acquired or is held or should be held by the plaintiff in performance of any agreement, covenant or obligation with or to the defendants or any of them, or for the benefit or advantage of the defendant Splitdorf Electric Company or for any of the defendants, either in whole or in part.

XI.

And your orator further shows unto your Honors that it is informed and believes, and therefore avers, that heretofore and prior to February 2, 1910, Edmund Joseph Kane was the true, original, and first inventor of the invention described and claimed in United States Letters Patent No. 1,280,105, granted September 24, 1918, which was not known or 264 used by others in the United States before his invention or discovery thereof, and was not patented or described in any printed publication in the United States or in any foreign country before his said invention or discovery thereof, nor more than two years prior to his application for said Letters Patent in the United States, and which was not in public use or on sale in the United States for more than two years before his said application, and for which no applications for Letters Patent upon the said invention had been made by the said patentee, his representatives or assigns, in any foreign country more than twelve months prior to his said application in the United States, and which had not been abandoned.

XII.

And your orator further shows unto your Honors that on February 2, 1910 the said Edmund Joseph Kane duly made application for Letters Patent of the United States for said invention, which said application was divided, and on January 14, 1915, the said Edmund Joseph Kane duly filed his divisional application for Letters Patent of the United States for said invention, and by mesne assignments in writing, duly recorded in the United States Patent Office, the said plaintiff Webster Electric Company (of Wisconsin) became possessed of the whole right, title and interest in and to the aforesaid invention, the aforesaid application for Letters Patent of the United States, and any Letters Patent that might issue as a result thereof, whereupon, due proceedings being had, Letters Patent of the United States, dated September 24, 1918, and numbered 1,280,105, were duly issued upon the aforesaid

divisional application, in conformity with law, granting to the said plaintiff, its successors, and assigns, for the term of seventeen years from and after September 24, 1918, the exclusive right to make, use and sell the said invention throughout the United States and territories thereof, and the plaintiff here makes profert of the original grant of said Letters Patent or a duly certified copy thereof.

265

XIII.

Your orator further shows unto your Honors that it is informed and believes, and therefore avers, that the defendants have individually and jointly and in cooperation and confederation and conspiracy with one another, produced or caused to be produced and exhibited or offered for sale, and sold or endeavored to sell, and are now exhibiting or offering for sale and endeavoring to sell or threatening to sell, and threatening to manufacture, in the Northern District of Illinois and the Eastern Division thereof, and elsewhere throughout the United States, devices or apparatus embodying the invention covered by and secured to the plaintiff by said Letters Patent No. 1,280,105, and are thereby infringing upon and threatening to infringe upon said Letters Patent and upon the rights of the plaintiff therein, and continue to threaten so to infringe upon said Letters Patent and upon the plaintiff's rights therein, in the Northern District of Illinois and the Eastern Division thereof, and elsewhere throughout the United States without its license or consent, and in defiance of its rights, since the granting and issuing of said Letters Patent and prior to the filing of this supplemental answer and the counter-claim and supplemental bill, whereby the said defendants have profited and are about to profit, and the said plaintiff has been and will be greatly injured by the defendants' infringement and threatened infringement of said Letters Patent and of the plaintiff's rights in respect thereto, and the said infringement and threats of infringement, if not enjoined, will seriously and irreparably injure and damage the plaintiff.

XIV.

Wherefore your orator, expressly waiving answer under oath, prays:

266 (a) For an injunction perpetually enjoining and restraining said defendants and each of them, their agents, officers, employees, and all persons in privity with them or any of them, from directly or indirectly making or caus-

ing to be made, using or causing to be used, selling or causing to be sold, or offering or threatening to manufacture or use or sell, apparatus or devices embodying or containing the inventions, or any of them, set forth in the said Letters Patent No. 1,280,105, or apparatus or devices which when attached, connected or organized in position for use, will result in an organization which embodies the invention of said Letters Patent No. 1,280,105, or which are designed and intended for use in such infringing organization and sold for that purpose, and from in any way infringing upon or violating said Letters Patent or plaintiff's rights therein, or of contributing to such infringement and violation of the plaintiff's rights therein.

(b) For a temporary injunction enjoining and restraining said defendants and each of them, their agents, officers, employees, and all persons in privity with them or any of them, from infringing said Letters Patent as aforesaid, or contributing to such infringement or from consummating, carrying out or further proceeding with any or all such threatened acts of infringement complained of.

(c) For an accounting of profits and damages, and that the damage assessed may be tripled, and for the costs of this suit.

(d) For such other and further relief as to the court may seem just.

And the plaintiff will ever pray.

WEBSTER ELECTRIC COMPANY
By WALTER BROWN

Vice President

WILLIAMS, BRADBURY & SEE
LEVINSON, BECKER, SCHWARTZ & FRANK
Solicitors and Counsel for Plaintiff.

267 State of Wisconsin }
County of Racine } ss:

Walter Brown, being first duly sworn, deposes and says that he is Vice President of the Webster Electric Company, a corporation of Wisconsin, the plaintiff in the above-entitled cause; that he has read the foregoing Original Bill in the Nature of a Supplemental Bill, subscribed by him on behalf of the said Webster Electric Company, the plaintiff therein named, and knows the contents thereof and that the same is true of his own knowledge, except as to such matters as are

stated to be on information and belief, and as to those he believes it to be true.

WALTER BROWN

Subscribed and sworn to before me at Racine, in the County of Racine and State of Wisconsin, this 21st day of October, 1918.

D. PETERSON
Notary Public.

268 ANSWER OF SPLITDORF ELECTRICAL COMPANY

(Filed December 4, 1918)

The defendant, Splitdorf Electrical Company, for answer to the "Original Bill In The Nature Of A Supplemental Bill," filed herein by the plaintiff, says:—

I.

That the defendant, the Splitdorf Electrical Company, in due course filed its answer to the original bill herein; that on the 2nd day of February, 1916, this defendant filed an amendment to its answer theretofore filed; that on or about said 2nd day of February, 1916, the defendant filed certain interrogatories to be answered under oath by an officer of the plaintiff corporation; that on or about the 17th day of February, 1916, the plaintiff, the Webster Electric Company, filed the answers under oath of the Secretary of the said Company to the aforesaid interrogatories; that on or about the 22nd day of May, 1916, the defendant, Splitdorf Electrical Company, again amended its answer; and also that various and sundry other papers, documents, and exhibits have been filed with the Clerk of the Court by the defendant, and now forms part of the record of the proceedings had in and about the aforesaid suit, and the defendant, Splitdorf Electrical Company, hereby adopts and makes a part of this answer all of the allegations of all the answers and amendments thereto heretofore filed by this defendant to all former pleadings filed by the plaintiff, or its predecessor the Webster Electric Company of West Virginia, which former pleadings or allegations are adopted and accepted by the plaintiff and made a part of its instant "Original Bill in the Nature of a Supplemental Bill," and also various and sundry other papers, documents and exhibits filed by this defendant, the Splitdorf Electrical Company, with the Clerk of the Court and forming parts

269 of the record of the proceedings had in and about the aforesaid suit.

II.

The defendant, the Splitdorf Electrical Company, answering the allegations set forth in Paragraphs III, IV, and V, of the complaint, alleges that it has no knowledge or information, except as set forth in the said paragraphs of the complaint, upon which to form any belief as to the truth of the allegations of fact therein set forth, and, therefore, puts the plaintiff upon strict proof thereof.

III.

This defendant denies, upon information and belief, that the said Edmund Joseph Kane was the true, original or first inventor of any new or useful improvement as alleged in said "Original Bill In the Nature of a Supplemental Bill," and denies that said alleged invention was not known or used in this country, or patented or described in any printed publication in this or any foreign country before his alleged invention thereof, or that the same had not at the time of his application for a patent therefor been in public use or on sale for more than two years.

IV.

This defendant further answering says, upon information and belief, and therefore alleges the fact to be, that the said Edmund Joseph Kane was not the original and first inventor or discoverer of the invention purported to be covered by the Letters Patent in suit, or of any material or substantial part thereof, and that the same, or material, or substantial part thereof, had been in public use and on sale in this country prior to said alleged invention, and for more than two years before the application for said Letters Patent in suit, by the following named persons, at the following named places, to-wit:—

Webster Electric Company of Racine, Wisconsin, at Chicago, Illinois, and Tiffin, Ohio;
270 International Harvester Company of Chicago, Illinois, at Milwaukee, Wisconsin, and Chicago, Illinois.

V.

This defendant further answering says that the said Edmund Joseph Kane was not the original and first inventor or discoverer of the invention purported to be covered by the

Letters Patent in suit, or of any material or substantial part thereof, and that the same, or material, or substantial part thereof, had been described and illustrated in printed publications and patents for more than two years prior to the date of filing of the application of the Kane patent in suit, as follows, to-wit:

Letters Patent of the United States, as follows:—

| | |
|---------------------------|---------------|
| No. 586,479—H. S. Dosh, | July 13, 1897 |
| “ 635,506—R. E. Olds, | Oct. 24, 1899 |
| “ 675,557—W. H. Cotton, | June 4, 1901 |
| “ 754,286—F. Dickinson, | Mar. 8, 1904 |
| “ 773,062—R. & J. Cooper, | Oct. 25, 1904 |
| “ 780,221—J. W. Packard, | Jan. 17, 1905 |
| “ 806,664—W. B. Hayden, | Dec. 5, 1905 |
| “ 811,122—A. R. Bellamy, | Jan. 30, 1906 |
| “ 820,535—G. J. Weber | May 15, 1906 |
| “ 867,696—B. Batkowski, | Oct. 8, 1907 |
| “ 870,954—W. B. Hayden, | Nov. 12, 1907 |
| “ 909,264—L. H. Wattles, | Jan. 12, 1909 |
| “ 916,312—R. Hennig, | Mar. 22, 1909 |
| “ 938,123—J. A. Charter, | Oct. 26, 1909 |

„ Foreign Patents as follows:—

| | |
|--|--|
| British Pat. No. 1359 of 1902 to Simms | |
| “ “ “ 3660 of 1904 to Hennig | |
| “ “ “ 25148 of 1907 | |
| “ “ “ 18621 of 1908 to Bickerton | |
| “ “ “ 24838 of Oct. 1909 to Milton | |
| German “ “ 49236 of Oct. 22, 1889 | |
| “ “ “ 166104 of Jan. 6, 1906 | |
| French “ “ 349829 published Jan. 13, 1905. | |

VI.

This defendant further answering says that the said Edmund Joseph Kane was not the original and first inventor or discoverer of the invention purported to be covered by the Letters Patent in suit, or of any material or substantial part thereof, and that the same, or material, or substantial part thereof, had been described and illustrated in printed publications and patents prior to the date of the supposed invention of the said Edmund Joseph Kane, as follows, to-wit:

Letters Patent of the United States, as follows:—

| | |
|---------------------------|---------------|
| No. 586,479—H. S. Dosh, | July 13, 1897 |
| “ 635,506—R. E. Olds, | Oct. 24, 1899 |
| “ 675,557—W. H. Cotton | June 4, 1901 |
| “ 754,286—F. Dickinson | Mar. 8, 1904 |
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| “ 780,221—J. W. Packard, | Jan. 17, 1905 |
| “ 806,664—W. B. Hayden, | Dec. 5, 1905 |
| “ 811,122—A. R. Bellamy, | Jan. 30, 1906 |
| “ 820,535—G. J. Weber, | May 15, 1906 |
| “ 867,696—B. Botkowski, | Oct. 8, 1907 |
| “ 870,954—W. B. Hayden, | Nov. 12, 1907 |
| “ 909,264—L. H. Wattles, | Jan. 12, 1909 |
| “ 916,312—R. Hennig | Mar. 23, 1909 |
| “ 938,123—J. A. Charter, | Oct. 26, 1909 |

Foreign Patents as follows:—

| |
|---|
| British Pat. No. 1359 of 1902 to Simms |
| “ “ “ 3660 of 1904 to Hennig |
| “ “ “ 25148 of 1907 |
| “ “ “ 18621 of 1908 to Bickerton |
| “ “ “ 24838 of Oct. 1909 to Milton |
| German Pat. No. 49236 of Oct. 22, 1889 |
| “ “ “ 166104 of Jan. 6, 1906 |
| French “ “ 349829, published Jan. 13, 1905. |

VII.

That as defendant is informed and believes, and therefore alleges the fact to be, the said Edmund Joseph Kane was not the original inventor or discoverer of any material or substantial part of the thing patented in Letters Patent No. 1,280,105 but that the said invention, and every material or substantial part thereof, was invented by one J. Lewis Milton, at Chicago, in the State of Illinois, who now resides at Cleveland, in the State of Ohio, prior to the filing of the application for patent in suit, and prior to any date of invention of the said Kane.

VIII.

That the application of Kane, Serial No. 541,428, filed February 2, 1910, was for a different, separate and independent invention from that described and claimed in and by 272 Claims 2 and 3 of the Kane patent in suit; that on November 14, 1916, a patent, numbered 1,204,573, was granted to the said Kane upon the application aforesaid, none of the

claims of which patent relate to or are in any sense for the alleged invention set forth and described in Claims 2 and 3 of the patent in suit, but did describe a wholly different and independent invention; that it was not until after the grant of the Milton patent on May 12, 1914 (No. 1,096,048) and not until long after the plaintiff, the Webster Electric Company, at Chicago, Illinois, and Tiffin, Ohio, and the International Harvester Company, at Chicago, Illinois, and at Milwaukee, Wisconsin, had introduced the alleged invention as described in Claims 2 and 3 of the patent in suit into extensive public use (to-wit during the year 1909, and continuously thereafter), that any claim or claims for or assertion of right to the subject-matter of the alleged invention described in Claims 2 and 3 was made by the said Kane in any application for letters patent, or otherwise; that the said Kane did not make any claim for or assertion of right to the subject-matter described in Claims 2 and 3 of the patent in suit until October 22, 1914; that prior to the filing of his application, Serial No. 541,428, on February 2, 1910, said Kane had knowledge of the said manufacture and sale upon the market during the year 1909, and continuously thereafter, by the International Harvester Company, and the plaintiff, the Webster Electric Company, of a large number of specimens embodying the subject-matter described in and by Claims 2 and 3 of the patent in suit; and that said Kane also had actual knowledge of the grant and issue of the said Milton patent; wherefore, the said Kane thereby abandoned or forfeited any right to a patent for said alleged invention, described in Claims 2 and 3 of the patent in suit, which he might otherwise have had thereto, and that, therefore, said Claims 2 and 3 of the patent in suit are void and of no force and effect.

That the application of Kane, Serial No. 541,428, filed February 2, 1910, was for a different, separate and independent invention from that described and claimed in and by Claims 7 and 8 of the Kane patent in suit; that on November 14, 1916, a patent, numbered 1,204,573, was granted to the said Kane upon the application aforesaid, none of the claims of which patent relate to or in any sense are for the alleged invention set forth and described in Claims 7 and 8 of the patent in suit, but describe a wholly different and independent invention, and that it was not until long after the grant of the Podlesak original Patent No. 1,055,076 granted March 4, 1913, and after the grant of the Reissue patent thereon, on Feb-

ruary 9, 1915, No. 13,878, and not until long after the plaintiff, the Webster Electric Company, at Chicago, Illinois, and Tiffin, Ohio, and the International Harvester Company at Chicago, Illinois, and Milwaukee, Wisconsin, had introduced the alleged invention described in Claims 7 and 8 of the patent in suit, into extensive public use, (to-wit, during the year 1909, and continuously thereafter), that any claim or claims for or assertion of right to the subject-matter of the alleged invention described in Claims 7 and 8 was made by the said Kane in any application for letters patent, or otherwise; that the said Kane did not make Claims 7 and 8 of the patent in suit until June 17, 1918, and that then said Claims 7 and 8 of the patent in suit were introduced by amendment into the Kane application, Serial No. 2097, filed January 14, 1915, upon which the patent in suit was granted, by Lynn A. Williams, acting as attorney and solicitor for the plaintiff, the Webster Electric Company, which plaintiff then, as defendant is informed and believes, had acquired the title to and ownership of the application of Kane, and which said Lynn A. Williams was the attorney and solicitor who advised the reissue of the original Podlesak Patent No. 1,055,076 granted March 4, 1913, and who prepared, filed, prosecuted, and obtained said Re-274 issue Patent No. 13,878, granted February 9, 1915; that prior to the filing of his application, Serial No. 541,428 on February 2, 1910, said Kane had knowledge of the said Manufacture and sale upon the market during the year 1909, and continuously thereafter, by the International Harvester Company, and the plaintiff, the Webster Electric Company, of a large number of specimens embodying the subject-matter described in and by Claims 7 and 8 of the patent in suit; wherefore, the said Kane thereby abandoned or forfeited any right to said alleged invention which he might otherwise have had thereto, and, therefore, the said Claims 7 and 8 are void and of no force or effect.

X.

Defendant further answering denies that subsequent to and after the decision of the Court of Appeals of the District of Columbia, awarding priority to Podlesak in the Interference No. 39,181, between Kane and Podlesak, as alleged in Paragraph IX of the complaint herein, the Commissioner of Patents allowed to the applicant Kane claims other than those involved in the said interference between Kane and Podlesak, and denies that the claims which were so allowed,—to-wit, Claims 7 and 8—differed from the claims involved in the in-

terference, and denies that said claims so allowed did not constitute and had not constituted the subject-matter or issue of said interference, but on the contrary alleges that said claims so allowed by the Commissioner of Patents in said application of Kane, upon which the patent in suit was granted (to-wit, Claims 7 and 8), subsequent to the termination of the said interference, and after the final judgment therein awarding priority to Podlesak, were substantially the same claims as those which were involved in and constituted the subject-matter or issue of the said interference, and were in fact claims

for the same invention involved in said interference, 275 and which was determined and adjudged to be the invention of Podlesak; wherefore the defendant alleges that the judgment or decision of the Court of Appeals in said interference between Kane and Podlesak, No. 39,181, awarding priority of invention to Podlesak, was and is res adjudicata of the right of said Kane to have a patent for the invention described in said Claims 7 and 8, and that therefore the said claims in said Kane patent in suit are void and of no force and effect.

XI.

That the original patent to Podlesak, No. 1,055,076, was granted and issued March 4, 1913, and that application was made by the said Podlesak for a reissue thereof, which Reissue No. 13878 was granted and issued February 9, 1915; that thereupon and on or about April 17, 1917, certain claims of said Podlesak Reissue patent (to-wit, Claims 13, 14, 15, 19, 20, 21, 22, 23 and 24 inclusive), were incorporated by amendment thereto in the application of the patent in suit, filed Jan. 14, 1915, and the defendant makes profert of said Podlesak Reissue patent to which reference may be had for these claims, that thereupon, as alleged in paragraph IX of the complaint, an interference was declared between the said reissue patent to Podlesak and the application of Kane; that, as alleged in said Paragraph IX the party Kane was represented by Lynn A. Williams as attorney and solicitor for the plaintiff, the Webster Electric Company, and by Sturtevant & Mason representing the party Podlesak, having been, as alleged in the complaint, employed for that purpose by the defendant, the Splittorf Electrical Company; that said interference resulted in a judgment of the Court of Appeals of the District of Columbia awarding priority of invention as to the subject-matter of said claims to the said Podlesak, as alleged in said Paragraph IX; that after said judgment or decision, the claims

aforesaid, constituting the subject-matter of the issue in 276 said interference, were cancelled and stricken out of the Kane application, and two claims were incorporated therein by amendment, (to-wit, Claims 7 and 8 of the Kane Patent), on or about the 17th day of June 1918. Defendant alleges that the Commissioner of Patents improperly, and without authority of law, granted the patent to the said Kane for the subject-matter described in Claims 7 and 8 thereof, because said Kane was estopped by his laches from making said claims for said subject-matter, and that, therefore, said claims are void and of no force and effect.

XII.

Defendant denies that on February 2, 1910, the said Edmund Joseph Kane made application for Letters Patent of the United States for the invention disclosed and claimed in the patent in suit; denies that the application upon which the patent in suit was granted was a division or continuation of the said earlier application filed February 2, 1910, Serial No. 541,428; and on the contrary alleges that the application of Kane upon which the patent in suit was granted (Patent No. 1,280,105), was for a different, separate and independent invention from that disclosed, described and claimed in said Kane application Serial No. 541,428, filed February 2, 1910, and that the subject-matter of said second application to Kane, Serial No. 2097, filed January 14, 1915, upon which the patent in suit was granted, was not disclosed in the earlier application of Kane, Serial No. 541,428.

XIII.

The defendant, Splitdorf Electrical Company, answering as to Paragraph VIII of the Supplemental Bill, admits that on or about the 24th day of August, 1915, an interference, No. 39,013, was declared between the application of Kane, filed January 14, 1915, Serial No. 2097, and a patent to John Lewis Milton, No. 1,096,048, of May 12, 1914; and that on or about the 277 30th of March 1917, the said Examiner of Interferences entered what purports to be a judgment, awarding priority of invention of the subject matter of Claims 2 and 3, relied upon by the plaintiff herein to Edward Joseph Kane; defendant alleges that said interference proceeding was not an adversary one, but was on the contrary collusive in that during the pendency of the interference, and when the said judgment was entered, the plaintiff, Webster Electric Company,

was the owner of the entire right, title and interest in and to the said Kane application and in and to the invention claimed therein, and that the entire right, title and interest in and to said John Lewis Milton patent was held by Lynn A. Williams, solicitor for the plaintiff herein, as Trustee, under and by virtue of a written contract of purchase between John Lewis Milton and the plaintiff, the Webster Electric Company, by the terms of which contract the said Trustee was empowered and directed by the parties hereto to transfer the entire right, title and interest in and to the said Milton patent to the said plaintiff, upon the payment of the said plaintiff to the said Milton of the agreed price therefor; that as defendant is informed and believes, and therefore alleges the fact to be, that the agreed purchase price has been paid, and the said title transferred by the Trustee to the plaintiff; and defendant is informed and believes, and therefore alleges the fact to be, that the said Lynn A. Williams at all times during the pendency of said interference between Kane and Milton was paid for his services wholly by the plaintiff, the Webster Electric Company, and, as defendant is informed and believes, and therefore alleges the fact to be, that all the expenses of said interference were paid by the plaintiff, and that the said Lynn A. Williams, acting solely for the plaintiff, controlled both sides of said interference and conducted the same both for Milton and Kane, and that, therefore, said judgment of priority in favor of Kane is void and of no
278 force and effect, and that the Commissioner of Patents was without power to grant a second patent to Kane for any invention described and claimed in and by said Milton patent, first issued to Milton, and that therefore the Kane patent is void and of no force and effect.

XIV.

This defendant, answering Paragraph XIII of said Original Bill in the Nature of a Supplemental Bill, denies that it has, individually or jointly, or in cooperation and confederation and conspiracy with any of the other defendants mentioned in said Original Bill in the Nature of a Supplemental Bill, produced, or caused to be produced, or exhibited, or offered for sale, or sold or endeavored to sell, or is now exhibiting or offering for sale, or endeavoring to sell, or threatening to sell or threatening to manufacture, in the Northern District of Illinois, and the Eastern Division thereof, or elsewhere throughout the United States, devices or apparatus embodying the alleged invention covered by Letters Patent No. 1,280,105, sued

upon, or have in any way infringed upon the rights of the complainant herein, or threatens to continue so to do, and denies that it has derived or realized any profits which plaintiff would have derived from its alleged exclusive rights, and denies that the plaintiff has been and will be greatly injured, or has incurred any damages by any unlawful or wrongful acts of said defendant.

Wherefore, the defendant demands that the Original Bill and the Original Bill in the Nature of a Supplemental Bill, be dismissed for want of equity, with costs to the defendant.

D. B. GANN

G. H. PEAKS

CHAS. C. BULKLEY

Solicitors for Defendant, Splitdorf Electrical Co.

STURTEVANT & MASON, ESQS.

of Washington, D. C.

Of Counsel.

279 SEPARATE ANSWER OF DEFENDANT HENRY JOSEPH PODLESAK TO THE SUPPLEMENTAL BILL. F

(Filed December 3, 1918)

The defendant, Henry Joseph Podlesak, for his separate answer to the original bill in the nature of a supplemental bill filed on or about October 24, 1918, by the Webster Electric Company of Wisconsin, as successor to the Webster Electric Company of West Virginia, the original plaintiff in above identified case, respectfully says:—

1. This defendant denies that he has committed or is committing any acts of infringement upon any of plaintiff's patents.

2. This defendant admits, upon information and belief, that the Webster Electric Company of Wisconsin is successor and assignee to the Webster Electric Company of West Virginia in all things including actions at law, books of record, and obligations, substantially as related in subdivision III of said Supplemental Bill; further answering, this defendant admits that said West Virginia company did file, on or about October 12, 1915, an original bill of complaint, as related in Subdivision I of said Supplemental Bill; defendant further admits that he was duly served with process or subpoena and that he made answer to said original bill which answer was filed on or about November 18, 1915, as related in Subdivision II of

said Supplemental Bill, and which said answer this defendant here adopts, in his behalf, for the same purpose as tho repeated in full herein.

3. The defendant alleges that he has no knowledge or information as to matters related in Subdivisions IV, V, VII, VIII, X, XI, and XII, except as advised by said Supplemental Bill.

4. Answering Subdivision VI of said Supplemental Bill this defendant denies that the plaintiff is entitled to the relief demanded against this defendant or to any relief whatsoever, either at law or in equity, against this defendant, and this defendant repeats his adoption hereinto of his answer filed on or about November 18, 1915, as tho repeated in full herein.

5. This defendant admits that interference No. 39,181 was declared by the United States Patent Office on or about October 29, 1915, between an alleged divisional application of one Kane, Serial No. 2097, and the Podlesak reissue patent No. 13,878, and that said interference was duly prosecuted and was finally determined, substantially as related in Subdivision IX of said supplemental Bill.

6. Answering the allegations contained in Subdivision XIII of said Supplemental Bill, this defendant denies that he has produced or caused to be produced, exhibited or is exhibiting, offered for sale, sold or endeavored to sell, is endeavoring or threatening to sell, or threatening to manufacture, in the Northern District of Illinois and Eastern Division thereof, either individually, or jointly and in co-operation and confederation and conspiracy with any one whatsoever, any devices or apparatus embodying any invention covered by Letter Patent No. 1,280,105, as now existing; and, without hereby admitting the validity of said Letters Patent No. 1,280,105, this defendant denies that he is infringing upon said Letters Patent or upon any plaintiff's rights therein.

7. This defendant denies that said plaintiff is entitled to relief demanded in Subdivision XIV of said Supplemental Bill against this defendant or to any relief whatsoever, either at law or in equity, against this defendant.

8. As to doings and things charged in said Supplemental Bill against said Emil Podlesak, said Splitdorf Electrical Company, and said Sumter Electrical Company, either individually or among themselves, this defendant is without knowledge.

9. And, by way of stating his set-off or counter claims, this

defendant, for this purpose, adopts, all and singular, the
281 matters and things hereinbefore set forth, and prays that
the matters and things, all and singular, contained in the
original bill of complaint as amended, may be by this Honor-
able Court fully and finally heard, adjudged and decreed on
the merits thereof; that the plaintiff herein, as successor and
assignee of the Webster Electric Company of West Virginia,
may be decreed to account to this defendant for royalties not
fully accounted for, due, and unpaid for periods previous to
October 1, 1915, as partially appears in Exhibit G, attached to
said original bill, to the end that there may be an avoidance of
multiplicity of suits; and prays to be hence dismissed with his
reasonable costs and charges in this behalf most wrongfully
sustained.

HENRY JOSEPH PODLESAK
In His Own Proper Person.

.....
Of Counsel.

State of Illinois }
County of Cook } ss

Henry Joseph Podlesak, being first duly sworn, on oath de-
poses and says that he is the defendant of that name men-
tioned in the Bill of Complaint and in his answer in the fore-
going entitled action; that he has read the above and fore-
going answer signed and subscribed by him and knows the
contents thereof, and that the same is true of his own knowl-
edge, excepting the matters herein stated on his information
and belief, and as to those matters he believes it to be true.

HENRY JOSEPH PODLESAK

Subscribed and sworn to before me this 2nd day of Decem-
ber 1918.

ELLEN H. CLEGG
Notary Public, Cook County, Illinois.

7. 282 ANSWER OF TESLA EMIL PODLESAK

(Filed December 7, 1918)

The defendant Tesla Emil Podlesak, for answer to the "Original bill in the nature of a supplemental bill" filed herein by the plaintiff, says:

I.

The defendant Tesla Emil Podlesak hereby adopts and makes a part of this answer all of the allegations of his answer heretofore filed by this defendant to all former pleadings filed by the plaintiff or its predecessor, the Webster Electric Company of West Virginia.

II.

Admits and alleges that the plaintiff Webster Electric Company of Wisconsin has at all times since its incorporation been and now is a citizen and resident of the State of Wisconsin, having its location, principal office and place of business at the City of Racine, Racine County, in the Eastern District of Wisconsin; and that this defendant Tesla Emil Podlesak has at all of the times mentioned in the pleadings on behalf of the plaintiff herein been, and at the time of the commencement of said action and of the filing of the supplemental bill by plaintiff continuously was and now is a citizen, resident and inhabitant of the City of Racine in the County of Racine in the Eastern District of Wisconsin; and alleges that there never has existed and does not now exist any diversity of citizenship between the plaintiff Webster Electric Company of Wisconsin and this answering defendant; that this defendant has never within the period stated in plaintiff's supplemental bill maintained, and does not now maintain any office or place of business within the Northern District of Illinois or in the Eastern Division thereof, and that this honorable court has not acquired jurisdiction over this answering defendant and is without such jurisdiction over the subject matter of this action or person of this defendant.

283

III.

This defendant denies that the cause of action stated or attempted to be stated against this answering defendant in plaintiff's original bill in the nature of a supplemental bill was or is assignable; and as this defendant is informed and verily

believes and states the fact to be, said plaintiff the Webster Electric Company of Wisconsin has not by virtue of said alleged assignment acquired any rights whatever against this answering defendant.

IV.

This defendant is without knowledge of the allegations contained in subdivision VIII of plaintiff's original bill in the nature of a supplemental bill.

V.

Answering subdivision IX of said original bill in the nature of a supplemental bill, this defendant admits that an interference proceeding numbered 39181 was declared by the United States Patent Office on the 29th day of October, 1915, between the divisional application of Kane Serial Number 2097 filed January 14, 1915, and reissue patent Number 13878 to defendant Podlesak, and was duly prosecuted in and through the United States Patent Office and into the Court of Appeals of the District of Columbia substantially as alleged in plaintiff's said supplemental bill; and admits and alleges that said interference resulted in a judgment of the Court of Appeals of the District of Columbia, awarding priority of invention as to the subject matter of said claims to the said Podlesak, as alleged in said paragraph IX; and alleges that after said judgment or decision, the claims aforesaid constituting the subject matter of the issue in said interference were canceled and stricken out of the Kane application and two claims were incorporated therein by amendment (to wit, claims 7 and 8 of the Kane Patent), on or about the 17th day of June 1918. Defendant alleges that the Commissioner of Patents improperly and without authority of law granted the patent to the said Kane for the subject matter 284 described in claims 7 and 8 thereof, because said Kane was estopped by his laches from making said claims for said subject matter, and that, therefore, said claims are void and of no force and effect; and this defendant denies that subsequent to and after the decision of the Court of Appeals of the District of Columbia, awarding priority to Podlesak in the interference numbered 39181 between Kane and Podlesak, the Commissioner of Patents allowed to the applicant Kane claims other than those involved in said interference between Kane and Podlesak, and denies that the claims which were so allowed, to wit, claims 7 and 8, differed from the claims in-

volved in the interference, and denies that said claims so allowed did not constitute and had not constituted the subject matter or issue of said interference, but on the contrary alleges that said claims so allowed by the Commissioner of Patents in said application of Kane, upon which the patent in suit was granted (to wit, claims 7 and 8) subsequent to the termination of the said interference and after the final judgment awarding priority to Podlesak, were substantially the same claims as those which were involved in and constituted the subject matter or issue of the said interference, and were in fact claims for the same invention involved in said interference, and which was determined and adjudged to be the invention of this answering defendant Podlesak; wherefore this defendant alleges that the judgment or decision of the Court of Appeals in said interference between Kane and Podlesak, Number 39181, awarding priority of invention to this answering defendant Podlesak, was and is *res adjudicata* against the right of said Kane to have a patent for the invention described in said claims 7 and 8, and that the said claims in the said Kane Patent in suit are void and of no force and effect.

285

VI.

This defendant denies, upon information and belief, that the said Edmund Joseph Kane was the true, original or first inventor of any new or useful improvement as alleged in said original bill in the nature of a supplemental bill, and denies that said invention was not known and used in this country or patented or described in any printed publication in this or any foreign country before his alleged invention thereof or that the same had not at the time of his application for a patent therefor been in public use or on sale for more than two years; and on information and belief alleges the fact to be that said Edmund Joseph Kane was not the original and first inventor or discoverer of the invention purported to be covered by Letters Patent 1280105 or of any material or substantial part thereof, and that the same or material or substantial part thereof had been in public use and on sale in this country prior to said alleged invention, and for more than two years before the application for said Letters Patent in suit, by the following named persons, at the following named places, to wit: Webster Electric Company of West Virginia at Chicago, Illinois, Tiffin, Ohio, and Racine, Wisconsin; International Harvester Company at Chicago, Illinois, and at Milwaukee, Wisconsin.

VII.

That, as defendant is informed and verily believes, the invention purported to be described in and covered by Letters Patent Number 1280105 was worked out in the shops of said International Harvester Company at Milwaukee, Wisconsin, by one Mr. Bradley, now deceased, William Andrew and Ed Wild and other experts in said shop, more than two years prior to the filing of the application therefor; and that, as this answering defendant is informed and verily believes, said Wil-

liam Andrew disclosed said invention to John Lewis Mil-

286 ton prior to the filing of the application of said Milton Patent Number 1096048, and prior to the application for said Kane Patent numbered 1280105.

VIII.

This defendant, answering paragraph XIII of said original bill in the nature of a supplemental bill, denies that he has, either individually or jointly or in confederation or in conspiracy with any of the defendants herein or with any person, firm or corporation whatsoever, produced or caused to be produced, or exhibited or offered for sale, or sold or endeavored to sell, in the Northern District of Illinois and Eastern Division thereof, or elsewhere throughout the United States, devices or apparatus embodying the alleged invention covered by Letters Patent 1280105; and denies that he, either alone or in combination or conspiracy with any person, firm or corporation whatsoever, ever has exhibited or is now exhibiting or offering for sale or endeavoring to sell, or threatening to sell, or threatening to manufacture in the Northern District of Illinois and the Eastern Division thereof, or any place else in or throughout the United States, devices or apparatus embodying the alleged invention or secured by Letters Patent 1280105; and denies that he, this answering defendant, either alone or in combination, confederacy or conspiracy with the other defendants or with any person, firm or corporation whatsoever, has infringed or was infringing or is now infringing, and denies that this answering defendant, either individually or jointly or in combination with any person, firm or corporation whatsoever, has ever threatened to infringe said Letters Patent or the rights of the plaintiff therein; and denies that he intends, either alone or in combination, confederacy or conspiracy with any person, firm or corporation whatsoever, to continue to threaten to so infringe said Letters Patent or plaintiff's rights thereunder, in the Northern District of

Illinois and Eastern Division thereof, or anywhere else 287 throughout the United States; and further answering, denies that he has in any manner profited by, because of or through any alleged infringement by any person, firm or corporation whatsoever, at any time or any place in said Northern District of Illinois or anywhere else throughout the United States of America or elsewhere; and denies that said plaintiff has been or will be greatly injured, or has or will incur, suffer or sustain any damages whatsoever by or because of any wrongful or unlawful acts of this defendant.

IX.

This defendant denies that said plaintiff is entitled to the relief demanded in subdivision XIV of said supplemental bill, against this defendant, or to any relief whatsoever, either in law or in equity, against this defendant.

X.

As to the doings and things charged in said supplemental bill against said Splitdorf Electrical Company and said Sumter Electrical Company, either individually or among themselves, this defendant is without knowledge.

Wherefore defendant demands that the original bill in the nature of a supplemental bill be dismissed for want of equity, with costs to this defendant.

THOMPSON MYERS & O'KEARNEY
*Solicitors for the defendant Tesla
Emil Podlesak.*

WILLIAM D. THOMPSON
Of Counsel.

WILLIAM L. HALL, Esq.
Local Counsel,

1539 Marquette Bldg.,
140 So. Dearborn Street,
Chicago, Illinois.

288 AMENDMENT TO ANSWER OF SPLITDORF ELECTRICAL COMPANY. FD 1

(Filed January 9, 1919.)

And now comes the defendant, the Splittorf Electrical Company, as amends its answer to the so-called "Original Bill In The Nature of A Supplemental Bill" of the plaintiff upon leave of Court first had and obtained, as follows:—

After the caption and title, erase the first paragraph commencing "The defendant, Splittorf," etc., and ending "says:—" and insert in lieu thereof, the following:—

"The defendant, Splittorf Electrical Company, by way of plea in the answer of the "Original Bill In The Nature Of A Supplemental Bill" of the plaintiff, alleges:—

1.

That under and by virtue of the contract between the said defendant and Emil Podlesak and Henry Joseph Podlesak, dated September 4, 1915, and made a part of the original complaint herein, and referred to therein as "Exhibit F", it became vested with the right to manufacture and sell magneto electric ignition devices under the patents embodied in the contract of license dated February 5, 1914, between the said Podlesaks and the plaintiff, the Webster Electric Company, which said contract is made a part of the original complaint herein and referred to as "Exhibit D"; and defendant further alleges that it also became vested with any and all rights

acquired by said Podlesaks, or either of them, under and 289 by virtue of said contract of February 5, 1914, (Exhibit D); that all and singular of the magneto electrical ignition devices made and sold by said defendant, and complained of as an infringement of the patent to Edmund Joseph Kane, No. 1,280,105, dated September 24, 1918, are and always have been made under and in accordance with the said Podlesak patents embodied in the said contract of February 5, 1914 (Exhibit D), and that, therefore, the plaintiff is estopped to claim that the manufacture and sale of the magneto electric ignition devices complained of herein is an infringement of the said Kane patent; and the defendant further alleges that at and prior to entering into the contract of February 5, 1915, (Exhibit D), the plaintiff herein was claiming ownership in and possession of the invention set forth and claimed in the patent to John Lewis Milton, No. 1,096,048, dated May 12, 1914,

which said claim of ownership and possession was known to each of the defendants, T. Emil and Henry Joseph Podlesak; whereby the said defendants T. Emil and Henry Joseph Podlesak had good reason to believe at the time of entering into said contract, were led to and did believe, and rely and act on such belief, that the plaintiff had waived, abandoned or relinquished any right or rights which it might have had in or under said patent of Milton, to claim any infringement of said patent by the manufacture and sale by the Podlesaks, or their assignee, of the invention described or claimed in the said Podlesak patents, and did not intend to insist upon any such right or rights as against the said defendants, the Podlesaks or their assignee, the defendant Splitdorf Electrical Company; and that the Kane patent in suit describes and is for the same invention described and claimed in said patent of Milton; wherefore, the plaintiff having waived any right which it might have had to claim infringement of the said Kane patent, and defendant having relied and acted
290 thereon; the plaintiff is estopped to maintain its cause of action against the defendant, Splitdorf Electrical Company, for the alleged infringement of the claims of the said Kane patent relied upon, or any one or more of them.

And the defendant, Splitdorf Electrical Company, asks the Court to hear, try and determine the defense aforesaid thus set up by way of plea in the answer, before proceeding to a trial of and hearing upon the general defenses hereinafter set forth.

And the defendant, Splitdorf Electrical Company, answering the said "Original Bill In The Nature Of A Supplemental Bill", generally, alleges and says:—

Change the ordinals of Paragraphs "1" to "XIV" inclusive, to II to XV inclusive.

DAVID B. GANN
GEORGE H. PEAKS
CHARLES C. BULKLEY

Solicitor for Defendant—Splitdorf Electrical Company.

Chicago, Jan. 8, 1919.

STIPULATION.

The parties, by their counsel, in order to obviate the necessity of certain formal proofs, hereby stipulate as follows:

1. Webster Electric Company, the plaintiff named in the Original Bill in the Nature of a Supplemental Bill, is a corporation organized and existing under the laws of the State of Wisconsin, having its principal place of business in Racine, Wisconsin.

2. Webster Electric Company of Wisconsin acquired by purchase the entire business, rights and obligations of Webster Electric Company, a West Virginia corporation, the plaintiff named in the original Bill of Complaint, by a written instrument executed on or about March 12, 1918, and on or about May 31, 1918, Webster Electric Company of West Virginia was duly dissolved and its corporate existence ended, all as alleged in the Original Bill in the Nature of a Supplemental Bill.

3. United States patent application Serial No. 2097, filed January 14, 1915, by Edmund Joseph Kane, for an improvement in Electric Igniters, was assigned by said Kane to 292 Webster Electric Company of West Virginia by a written instrument executed on or about April 20, 1916, and recorded in the United States Patent Office on or about May 4, 1916; and said application was assigned by said Webster Electric Company of West Virginia to plaintiff, Webster Electric Company of Wisconsin, by a written instrument executed on or about March 12, 1918, and recorded in the United States Patent Office on or about March 25, 1918, pursuant to which United States patent No. 1,280,105 was granted by the Commissioner of Patents to Webster Electric Company of Wisconsin.

4. Defendant Sumter Electrical Company executed a certain assignment to Splitdorf Electrical Company dated on or about February 1, 1916, and recorded in the United States Patent Office on or about March 15, 1916, a copy of said assignment being attached hereto.

5. Defendants, Emil Podlesak and Henry Joseph Podlesak, as parties of the first part, and defendants Splitdorf Electrical Company and Sumter Electrical Company, as parties of the second part, entered into a certain agreement on or about the 3rd day of November, 1915, with relation to the word "Podlesak", a copy of which agreement is attached hereto.

6. On October 28, 1909, John L. Milton, a citizen of the United States, was in possession, within the United States, of knowledge of the invention disclosed in United States Patent to Milton No. 1,096,048, issued May 12, 1914, for Magneto Generator, and in the corresponding British patent to John L. Milton No. 24,838, of 1909, application for which was filed in the British Patent Office on October 28, 1909.

7. Patent Office printed copies of United States patents may be introduced in evidence by either party with the same force and effect as certified copies thereof, subject to correction if error be found.

8. Printed copies of all letters patent of Great Britain may be used with the same force and effect as certified copies thereof, and the publication dates printed thereon shall be taken as prima facie true.

9. The accompanying Exhibit B is a sample of devices manufactured and sold by the defendant Splitdorf Electrical Company subsequent to February 9, 1915, and continuously thereafter and until the present date.

10. The accompanying Exhibit C is a sample of devices manufactured by the defendant Splitdorf Electrical Company beginning on or about October, 1918, and continuously thereafter until the present date, and sold or offered for sale during the said period by the said Splitdorf Electrical Company, subject to the objection of immateriality.

WILLIAMS, BRADBURY & SEE

Attorneys for Plaintiff.

CHARLES C. BULKLEY

Attorney for Defendants.

January 3, 1918.

Whereas, the Sumter Electrical Company, a corporation organized and existing under and by virtue of the laws of the State of South Carolina, having its principal office and place of business in the City of Sumter, in said State, is the joint owner of the inventions and the Letters Patent of the United States of America therefor, to-wit:

No. 947,647 issued Jan. 25, 1910.

No. 948,483 issued Feb. 8, 1910.

No. 1003,649 issued Sept. 19, 1911.

No. 1022,642 issued Apr. 9, 1912.

Re-issue 13,878 issued Feb. 9, 1915.

No. 1056,360 issued Mar. 18, 1913.

No. 1101,956 issued June 30, 1914.

No. 1098,052 issued May 26, 1914.

No. 1098,754 issued June 2, 1914.

Whereas, the Splitdorf Electrical Company, a corporation organized and existing under and by virtue of the laws of the State of New Jersey, having its principal office and place of business in the City of Newark, and State of New Jersey, is desirous of acquiring the entire right, title and interest in and to the said Letters Patent and any reissues, divisions, renewals or extensions of the same and the inventions covered by said patents, and to all future inventions or improvements relating to the subject matter of said patents which may be hereafter acquired by said Sumter Electrical Company; and

Whereas various agreements have been entered into between the said Sumter Electrical Company and Splitdorf Electrical Company, under which agreements the said Sumter Electrical Company has agreed to execute all papers necessary to perfect said Splitdorf Electrical Company in the full title to said Letters Patent and inventions aforesaid.

Now, Therefore, To All Whom It May Concern, Be it known, that for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration to it in hand paid, the receipt whereof is hereby acknowledged, the said Sumter Electrical Company has sold, assigned, transferred and set over, and by these presents does sell, assign, transfer and set over, unto the said Splitdorf Electrical Company, its successors and assigns, all its right, title and interest in and to the Letters Patent aforesaid, including all claims or rights of whatsoever kind or nature arising out of past infringements thereof or any of them, the same to be held and enjoyed by the said Splitdorf Electrical Company for its own use and behoof and for the use and behoof of its successors or assigns, to the full end of the terms of the said Letters Patent and of the Letters Patent which may be issued hereafter for any reason, and any and all reissues, divisions, renewals or extensions thereof, as fully and entirely as the same would have been held and enjoyed by the said Sumter Electrical Company if this assignment and sale had not been made; and the said Sumter Electrical Company does hereby authorize and request the

Commissioner of Patents to issue the Letter patent which may be granted upon any reissue or renewal of said patents to the said Splittorf Electrical Company, in accordance herewith;

In Witness Whereof, the Sumter Electrical Company has caused its corporate seal to be hereunto affixed and this instrument to be signed by Charles Thomas Mason, its President, and F. C. Manning, its Secretary, this 1st day of February, in the year of our Lord One Thousand Nine Hundred and Sixteen.

SUMTER ELECTRICAL COMPANY,
By C. T. MASON

President.

(Corporate Seal)

Attest:

F. C. MANNING
Secretary

296 State of South Carolina, }
County of Sumter } ss.

I, E. H. Rhame, a Notary Public in and for said County and said State, do hereby certify that said Charles Thomas Mason, whose name as President of the Sumter Electrical Company, a corporation, is signed to the foregoing conveyance, and who is known to me, acknowledged before me on this day that being informed of the contents of the conveyance, he as such officer and with full authority executed the same voluntarily for and as the act of said corporation, February 1, 1916.

R. H. RHAME (L. S.)
Notary Public for S. C.

297 Memorandum of Agreement made and entered into this 3rd day of November, A. D., 1915, by and between Emil Podlesak of Racine, Wisconsin, and Henry Joseph Podlesak of Chicago, Illinois, parties of the first part, and Splittorf Electrical Company, a corporation organized and existing under the laws of the State of New Jersey, having its principal office and place of business located in the City of Newark, County of Essex, in said State, and Sumter Electrical Company, a corporation organized and existing under the laws of the State of South Carolina, having its principal office and place of business in the City of Sumter, County of

Sumter, in said State, said corporations jointly parties of the second part.

Whereas the parties hereto on the 4th day of September 1915 made and entered into a certain contract in writing, whereby the parties of the first part assigned to the parties of the second part their entire interest in certain patents and applications for patents and patent rights, together with the entire interest in certain license agreements with the Webster Electric Company, and also the entire interest and good will of the parties of the first part in the business of manufacturing and selling magneto ignition apparatus for internal combustion engines and any other apparatus described or claimed in said letters patent and applications and included in said license agreements, said contract and assignment having been recorded on the 27th day of September 1915 in Liber A 98, page 190 of Transfers of Patents; and

Whereas it was recited in said written contract and assignment that the parties of the second part were desirous of acquiring among other things the entire interest of the 298 parties of the first part in the business of manufacturing and selling ignition apparatus for internal combustion engines together with their good will appertaining to the said business, in part represented by the association of their names or either of them with said business or with apparatus manufactured or to be manufactured and sold under the aforesaid letters patent and applications or said agreements; and

Whereas at the date of the execution of the aforesaid agreement and assignment, it was not contemplated or intended by any of the parties that the exercise and enjoyment of the rights conveyed thereby the parties of the second part, should conflict with the rights theretofore granted to the said Webster Electric Company as duly acknowledged in the aforesaid contract and it was inadvertently overlooked that the conveyance to the parties of the second part of the right to use the name "Podlesak" on certain devices to be produced by them or either of them, might lead to a misunderstanding of the real intentions of the parties to the said contract;

Now Therefore to remedy the said oversight in the said recorded writing, as a part of the consideration for the transfer therein named, and to carry out the real intention of the parties, the parties of the second part hereby covenant and agree to and with the parties of the first part, that any and

Memorandum of Agreement.

all products of either of the aforesaid corporations, parties of the second part, on which or in connection with which they shall hereafter use the name "Podlesak" shall in each and every instance bear or have attached thereto an additional inscription or marking showing the name of the 299 corporation or person manufacturing the same and the place where the said article was manufactured, applied in connection with and with the same degree of prominence and permanence as the said name "Podlesak", and in all advertisements and descriptive matter issued by the parties of the second part or either of them and referring to the said goods, wherein the name "Podlesak" is used in connection therewith, there shall also appear with equal prominence the name of the manufacturer and the place of manufacture, showing clearly and plainly that said product was not manufactured by the Webster Electric Company.

In Witness Whereof the parties of the first part have hereunto set their hands and affixed their seals and the parties of the second part have caused their names to be hereunto signed and their respective corporate seals affixed by their proper officers to that end duly authorized.

..... (Seal)
 (Seal)

By
President.

Attest:

.....
 Place
 Date

By
President.

Attest:

.....
 Place
 Date

..... } ss:
 }

On this day of , 1915, before me personally appeared Emil Podlesak, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

.....
Notary Public.

..... } ss:
 }

On this day of , 1915, before me personally appeared Henry Joseph Podlesak, to me known to be the person described in and who executed the foregoing instrument and acknowledged that he executed the same as his free act and deed.

.....
Notary Public.

301 State of New Jersey } ss:
 County of Essex }

I, , a Notary Public in and for said county in said State, hereby certify that John F. Alvord, whose name as President of the Splitdorf Electrical Company, a corporation, is signed to foregoing agreement, and who is known to me, acknowledged before me on this day that, being informed of the contents of the agreement, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation. Given under my hand this day of 1915.

.....
Notary Public.

State of South Carolina } ss:
 County of Sumter

I, _____, a Notary Public in and for said county in said State, hereby certify that Charles Thomas Mason, whose name as President of the Sumter Electrical Company, a corporation, is signed to the foregoing agreement, and who is known to me, acknowledged before me on this day that, being informed of the contents of the agreement, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation. Given under my hand this _____ day of _____ 1915.

Notary Public.

STATEMENT OF EVIDENCE.

PLAINTIFF'S EVIDENCE.

EDWARD H. KIMBARK, called as a witness on behalf of plaintiff, testified as follows:

302

Direct Examination by Mr. Williams.

Age 53, residence Evanston, Illinois, employed by International Harvester Company in the office of the Experimental Department. Has charge of the records of that department. Asked to produce originals or copies of certain correspondence which passed in or about 1909, between the Chicago Office of the company and its Milwaukee office, or the Experimental Departments of the two places, produced what purported to have been an original letter dated March 15, 1909, written by Mr. Waterman to the Experimental Department at Chicago. This letter was received by the witness personally at about its date and placed by him in the files of the company at that time. Letter offered in evidence as Plaintiff's Exhibit No. 1. Waterman letter of March 15th.

Objected to by defendants' counsel as not competent as against the defendants, the Splitdorf Company, and

because of no proper foundation for its reception in evidence. Received, subject to objection.

Witness produced a letter dated April 29, 1919, purporting to have been written by T. K. Webster to the International Harvester Company. Letter came to the attention of the witness at or about the date it bears and was placed in the files of the company.

Letter offered in evidence as Plaintiff's Exhibit No. 2. The same objection as to Exhibit No. 1 and the additional one of immateriality. Same ruling.

303 Witness produced letter dated March 17, 1909 from Mr. Waterman and made same statement respecting it as in respect to preceding letters. Letter offered in evidence as Plaintiff's Exhibit No. 3. Same objection and ruling.

Witness produced a letter dated June 11, 1909 to Mr. Waterman and made same statement respecting it. Letter offered in evidence as Plaintiff's Exhibit No. 4. Same objection and ruling.

Witness identified photograph attached to letter of April 29, 1909 as one that was found in the files of the company attached to the letter and assumed that the photograph was attached to the letter at the time of its receipt and had since remained attached to it.

Photograph offered in evidence as Plaintiff's Exhibit No. 5. Same objection, same ruling, with understanding that same objection and same ruling may apply to further testimony of the witness and to further exhibits of a similar character.

Witness produced a paper dated August 30, 1909 which he identified by the signature of Mr. Cavanaugh and some notations upon it, and which he stated was a copy made on or about August 30, 1909, of the paper, the original of which was returned to Milwaukee and was presumably there at the time the witness testified.

Paper offered in evidence as Plaintiff's Exhibit No. 6.

Witness was shown another paper which appeared to be a duplicate of Plaintiff's Exhibit No. 6, and stated that it was simply another copy of the same paper—that the original would bear the original signatures of the people signing the decision, while the copies bore merely typewritten signatures. The witness identified the initials of Mr. W. A. Cavanaugh on the copy and stated that he was dead, and that during his life-time he was the assistant manager of the Experimental Department of the International Harvester Company at Chicago, and that witness was familiar with his handwriting

304 and able to identify his signature.

Witness was shown a letter dated June 3, 1909, addressed "W. A. Cavanaugh, Harvester Building, City" and signed "Webster Manufacturing Company, T. K. Webster," and bearing a number of rubber stamps and notations, among others "Received by Experimental Department June 4, 1909." Witness identified letter by his notation appearing upon it and reading "Mr. Tyson: send copies as marked" and his initials under date of June 5th, which witness stated satisfied him that he had the letter in his possession at about that time.

Letter offered in evidence as Plaintiff's Exhibit No. 7.

Witness is shown another paper rubber-stamped in various ways, among others, "New Works Committee, Extract from report of Meeting, 176, 5/20/09" and identified it, by his initials upon it, in his own handwriting, dated June 1st, also the words "Three copies sent" in his own handwriting, and stated that paper was in his possession on or about June 1, 1909 and placed by him in the files at that time.

Paper offered in evidence as Plaintiff's Exhibit No. 8.

Witness was shown a paper dated May 26, 1909, signed "International Harvester Company, Milwaukee Works, H. A. Waterman, Superintendent, by L. C. Bradley" and identified it by its general appearance and by a check made in front of the name of the witness, but stated that Mr. Waterman was present and could perhaps identify it more distinctly.

Paper offered in evidence as Plaintiff's Exhibit No. 9.

Witness produced a letter from the Sales Department file written by witness to Sales Division Manager, Mr. A. E. Mayer, dated May 6, 1909 and identified it as an original letter dictated and signed by the witness at the date it bore.

Letter offered in evidence as Plaintiff's Exhibit No. 10.

Witness being asked whether he was in a position in 305 the spring of 1909 to know of the transactions to which the letters introduced in evidence related, said:

"I was familiar with the fact that we were selling, or putting on our engines, rather, for sale, the Milton magneto, and that there were serious complaints about it from the country, and that we had virtually decided, through the men that had charge of that part of the work, to abandon it unless it was corrected, and that there was a corrected or improved form submitted, which, after a test, was used, at least extensively, and the document there being an extract from the New Work Report has reference to the situation as it developed at that time."

Witness was shown a device and said "I am not a magneto

expert, and I can only say that it looks like the device that we were using. The details of its construction would be largely unknown to me."

Device submitted to the witness was offered in evidence, subject to further identification, as Plaintiff's Exhibit 11.

Witness stated referring to the papers Plaintiff's Exhibits 1 to 10, that it was at about the date of Mr. Waterman's report of March 15, 1909 that the conclusion was reached that the original form of Webster or Milton magneto was unsatisfactory, and that its use should be discontinued.

Witness identified another piece of apparatus submitted to him as being similar in its general form to the magneto which was offered to the company as an improved form of the Milton magneto and stated that, as near as he could judge, it was the same.

Piece of apparatus last referred to offered in evidence as Plaintiff's Exhibit No. 12.

Witness stated by reference to the papers which he had produced, as well as from his independent recollection, that it was some time in June, 1909 that the new form of device was adopted and accepted by the International Harvester Company.

Witness being asked if he had any independent recollection as to when it was that the Harvester Company decided that the Milton magneto was unsatisfactory said:

"A. I would have difficulty in placing the month and year, without reference to the files, but I perhaps could, of my independent recollection, before I had seen the files, place it within one or two years.

Q Have you any independent recollection as to when it was that the improved Milton magneto was accepted, other than that which you obtained from an examination of those papers?

A When the New Work Committee examined this magneto it, was at the Milwaukee works, and my recollection is that I went to the Milwaukee works, in the capacity of secretary of that Committee, and saw the magneto, saw it explained by the experts, and that soon after that, within the course of perhaps a month or six weeks, it had been tested out, and we, as a department, authorized its use on the Harvester engines."

Being asked whether he had examined the files of the Experimental Department at Milwaukee to discover whether

there were any papers there relating to this matter, witness said:

"A I looked only in our own files, at the Chicago Office, for certain letters which the attorneys on the other side asked me to see if I could locate. That is as far as my examination extended."

Witness said that his examination of the Chicago files showed that two letters were missing from it, which were produced by Mr. McCaleb, who is with Mr. Williams, but Mr. McCaleb did not tell witness where he found or got them.

307 H. A. WATERMAN called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Mechanical engineer, age 47, residence, Laporte, Indiana. Was connected with the International Harvester Company as superintendent of its Milwaukee plant. Company was engaged there in the manufacture of internal combustion engines and witness had full charge of all the manufacturing at that time. Witness was present and heard the testimony of Mr. Kimbark just given.

Attention of the witness called to Plaintiff's Exhibit No. 1. Witness identified it as his personal report to the Experimental Department of the conditions then existing, was signed by witness and written by him on March 15, 1909.

Attention of the witness was called to the letter, Plaintiff's Exhibit No. 2, but witness said he never saw the letter and did not know that he ever saw a copy of it.

Attention of the witness was called to the letter, Plaintiff's Exhibit No. 11, concerning which witness said he probably saw a copy of it, but did not remember it—that it would have come to him as a mere matter of routine.

Witness identified the letter Plaintiff's Exhibit No. 9 by the signature of Mr. Bradley who was mechanical assistant to the witness in his office, and who died shortly after the date of that letter, May 26, 1909. Being asked as to the meaning of the words "New Work Committee Report" appearing in this letter of May 26, 1909, witness said:

"A The organization of the International Harvester Company at that time included at the Chicago Office what they called a New Works Committee, made up of the department

heads, including sales, manufacturing and experimental, 308 approximately. In charge of the works at Milwaukee, for instance, the superintendent would delegate certain work to be completed to one or more individuals. When that test was completed the results of the test would be reported upon a form, a printed form, which is called the New Works Report, that report going direct, I think, to the Experimental Department in Chicago for use of the New Works Committee, a copy of which was retained in my office."

Attention of the witness being called to paper marked Plaintiff's Exhibit No. 8 and witness being asked if he could say what it was, replied:

"A Well, there is nothing here to indicate definitely that that is the report of the gentlemen who came to Milwaukee from Chicago to see the apparatus under test, but in my own mind I am sure that is the case. In other words, representatives of the New Works Committee came to Milwaukee to see the engine under test, and that is a report of what they were told."

Witness said the initialing upon the left-hand side of the paper with a rubber stamp indicated that a copy of the statement was sent to the witness from Chicago.

Continuing, the witness further said:

"The original statement was made at Milwaukee and submitted to the Chicago Office. Then a meeting was held in the Chicago office of the parties interested. They made up a general statement, of which that is one section, and that general statement was distributed among the men at the Works interested."

In regular routine a copy of this report would have gone to the witness at Milwaukee, but witness did not definitely recall the date when he received it.

Being asked whether he recalled giving the advice as stated in the report, witness said:

309 "I only recall the fact that we did not with my sanction ship any more of the Milton magnetos, and when we resumed shipment we shipped another kind."

The matter of the improved magneto or new magneto had been previously discussed between the witness and other department heads of the Harvester Company in Chicago or Milwaukee; the Sales Department was demanding shipment of engines and was naturally waiting for the decision of witness as to whether or not that type would be satisfactory. As to whether or not witness recommended that the thing be tried out on an engine for several weeks, witness said:

"Very likely, although I do not know that. There is a system in the Harvester Company by which, when the Works, responsible for any particular part of any program, decides that it is right to go ahead and complete such work, the decision is put through. That is according to that form that you have there, what we call a 'decision.' When that magneto was considered satisfactory a decision originated in my office, probably signed by Mr. Bradley, possibly by myself, which went to Chicago. Then the New Works Committee, possibly Mr. Mayer of the Sales Department, would decide to approve or disapprove my recommendation, so that if any decision was made it originated at Milwaukee under my direction."

With reference to the new form of apparatus and to witness advising that he would like to run it for two or three weeks before passing upon it, witness said:

"I remember distinctly the day the new form was presented to me."

Being asked to describe that new form, particularly in so far as it differed from the older form with which witness had found fault, witness said:

310 "Well, in a word, the real difficulty of the older form was that it very soon and very seriously was out of order. It failed to work properly. The new form was concise and compact, and of such construction that it was not easily distorted, and there was practically no clearance which could not be maintained, necessary clearance, and that it could be removed completely without danger on the part of the farmer or operator of putting it out of order when he tried to put it back in place again. It was compact with the plug. That is the brief way of saying what the difference was."

Being shown the piece of apparatus marked Plaintiff's Exhibit No. 12 and asked to state what it was and when apparatus of that form first came to his attention, witness said:

"That I am quite sure is the first departure from the construction which gave trouble, to which we have just been referring, and this sample was placed on my desk by Mr. Maurice Kane and his son."

Q The two Kanes who are here in the court room today?

A Mr. Maurice Kane and Mr. Joe Kane. I remember it distinctly, because that is the first time I met Mr. Joe Kane."

Being asked to state by reference to the various papers Plaintiff's Exhibits 1 to 10 inclusive, or as a matter of his independent recollection, when it was that Maurice Kane and his

son Joe Kane brought this improved form of machine to the witness at Milwaukee and put it on his desk, witness said:

"Well, it wasn't many weeks—it must have been, oh, approximately, a month or so afterward—after we had made the decision not to ship any more of the older ones and had made the statement to which you first referred."

Witness identifies Plaintiff's Exhibit 4 as a letter dictated and signed by the witness at the date it bears, June 11, 311 1909, and addressed to Experimental Department, Harvester Building, Chicago, and says:

"It is a complete statement of what we then thought the new magneto was."

Witness identifies the improved Milton magneto referred to in his letter of June 11, 1909 with Plaintiff's Exhibit No. 12, saying:

"I am quite sure that is the identical apparatus. I mean that this is so near like the other one that I could not tell the difference from memory."

It was of a machine like Plaintiff's Exhibit No. 12 that witness wrote that it overcame the important objections raised by him in his letter of March 15th. Witness further testified:

"Q Now, in this letter of yours, dated June 11th, you make some argument, as I understand you, as to why the Harvester Company should purchase from the Webster Manufacturing Company without including the igniter plug as a part of their product. Now, will you please explain, referring if you like to the Plaintiff's Exhibit No. 12, what you had in mind in making that recommendation.

A Every engine, or approximately every engine, has a different sized plug as regularly equipped, independent of the magneto. This part of the magneto, of course, includes the plug, so that in having the Webster people furnish parts to us we took their sample and made the plugs ourselves so that they might be interchangeable with our own parts, but we did not depart from the construction as they had it there at that time in the sample.

Q Well, then, as I understand you, or let me ask you first: Following your approval of the machine which the Webster people submitted through Mr. Kane, and which you 312 tested and then wrote approvingly of on June 11th, did the Harvester Company use and install equipment like this Plaintiff's Exhibit No. 12 in considerable quantities?

A Yes, sir; just as soon as we could make our parts and they could furnish theirs, we put them on the engines and stopped the other.

Q Now, do I understand you that it was your recommendation on June 11, 1909, that the Harvester Company, rather than the Webster Company, manufacture some part of the equipment as embodied in this Plaintiff's Exhibit No. 12?

A Yes, sir.

Q That is, some part of this apparatus here you thought had best be made by the Harvester Company and some other part by the Webster Company?

A Yes, sir.

Q Now, won't you describe in some way, so that it will be clear on the written record, the part of that equipment which you recommended that the Harvester Company should make and as distinguished from the part which was to be purchased from the Webster Company?

A The Webster Company made what you might properly call the magneto proper. The Harvester Company made what might be included in the plug and the bracket which supports the magneto.

Q And it was your recommendation, then, that the manufacture be divided in that way?

A Yes, sir.

Q That is the recommendation contained in your letter here of June 11th which I have read?

A Yes, sir.

Q And as I gather from your explanation in this letter, your argument was that since the plug and the bracket proper would take somewhat different shapes as required for different engines, whereas the magneto proper, as you have termed it, might be identical for all of the different engines, therefore, you thought that the Harvester Company had best make the plug and bracket part in order not to have to carry in stock magnetos sufficient to equip all of the different plugs and brackets?

A Yes, sir, but more in particular because the fitting of the plug to the engine would naturally be the shop product of the International Harvester Company and not of the magneto factory.

Q Now, your letter of June 11, 1909 uses this phrase—after stating the reason you say:

“We should not have the igniter plug included as a part of their product”;
that is, as a part of the Webster Company's product. Now, when you refer there to the igniter plug you refer to some part of the equipment as embodied in this Plaintiff's Exhibit 12, do you not?

A Yes, sir.

Q In this letter you say that you already have seven different designs of igniter plugs for make-and-break engines; that is—

A I understand. That means that there are seven different sizes and forms for each—one for each different size of engine.

Q One of those igniter plugs as referred to in that sentence of the letter,—is that indicated on this cut on the back of Plaintiff's Exhibit No. 13?

314 A Yes, sir. That refers to a part here (indicating.)"
Being shown the paper marked Plaintiff's Exhibit No. 6, witness said:

"That is a copy of the—if not the original—I rather think it is the original—I can't tell. I think it is the original, at least a copy, of the formal decision to which I referred some time ago as originating at the Works recommending or determining that a certain process should be carried out—in this case the adoption of this magneto. It has my rubber stamp on it and went through my office. That punch there (indicating) indicates my own personal contact with the letter. By the way, the other one you asked about had my punch on it. That is positive proof it had my personal attention. I didn't notice that before—that 'H. A. W.' down in the corner there.

Q Now, do I understand that on August 30, 1909 all of the formalities had been complied with by the Harvester Company in determining and settling the matter that from thenceforth the form of the machine as submitted to you by Mr. Kane was to go into use?

A If that is signed, then that is complete; that is final. Yes, that is signed by Mr. Cavanaugh personally, so that is final. The date in the corner would determine that, in ink at the bottom. That is the final approval of the Chicago Office, although the work didn't go into effect until August 30th.

Q You mean this date, September 21, 1909, that is Mr. Cavanaugh's final approval?

A This August 30th is the date upon which the work went into effect at the plant, and this date, September 21st, is the date upon which Mr. Cavanaugh placed his final approval at Chicago in the file."

315 Being asked what was said and what occurred on the occasion when Maurice Kane and his son Joe Kane came to the Milwaukee Works with the first sample of the new form

of machine, substantially identical with Plaintiff's Exhibit No. 12, witness said:

"Why, I remember it as if it were yesterday. Mr. Kane very seldom came to Milwaukee, and he came in and introduced his son to me, and his son put that magneto on my desk. I didn't notice it at first, and then Mr. Kane called it to my attention and wanted to know what I thought of it. 'Well,' I said, 'you have got something now.' I remember that very well, indeed, almost those exact words."

Witness had been acquainted with Maurice Kane prior to his coming to Milwaukee at that time; he was manager of the Experimental Department, directly superior to Mr. Cavanaugh, and his regular place was in the Harvester Building at Chicago.

The first sample of the new machine left with the witness by Mr. Kane was put on an engine and run continuously night and day for several weeks, during which time the witness saw it several times, saying: "But, of course, there was nothing to indicate anything different from any other magneto until it went wrong—unless it went wrong." And it was as the result of this test that witness wrote his letter of June 11, 1909, of which witness says:

"I would say sure that I wrote that letter. It is pretty strong; and I do not remember of any trouble with it at all."

The Webster Company began making deliveries or shipments of the new form of machine like Plaintiff's Exhibit No. 12 in September 1909, and witness remembered no change that was made in the design while he remained with the works. Practically all engines shipped abroad and many in this country were equipped with the new device—"it would be a matter of hundreds at least."

The recommendation of the witness that the plug and 316 bracket part of the equipment should be made by the

Harvester Company and the magneto proper furnished by the Webster Company was carried out in practice. Referring to Webster Company, witness said:

"It was their sample that we tested. Then we made our own drawings and templates and tools for manufacture of that sample.

Q Your drawings were made from that sample, as I understand you?

A Yes, sir.

being the same as that made by the Harvester Company according to the plan which the witness had explained, saying:

"So far as I can tell it is the same thing. This is indi-

cated to be a Harvester product by the monogram on the casting, which is from our pattern; the monogram on the pattern, Harvester pattern; also the engine number."

The plan for the division of the work of manufacturing the new device between the Webster Company and the Harvester Company was discussed personally by the witness with Mr. T. K. Webster of the Webster Company, and agreed upon with him.

Witness had never seen an equipment like Plaintiff's Exhibit No. 12 until it was brought to Milwaukee by the Kanes, nor heard any discussion of that form of equipment with the integral plug and bracket support prior to that time, witness saying:

"No. I remember that well, because I had my boys get together and we discussed the possibility of making something satisfactory if the Webster people couldn't furnish it, and when this was presented I said this would be satisfactory and we wouldn't attempt any further work of that kind."

Witness being asked to state by reference to his letter of June 11, 1909, when it was that Kane first presented the new machine to him, said:

317 "Well, I know I wrote this letter, and I know that followed the action approving of the design, and I know that it was only a few weeks because we didn't get far with our own work attempting to try to make something satisfactory—and the tests on the engine which ran night and day had intervened."

Witness identified the photograph, Plaintiff's Exhibit No. 5, attached to the letter of April 29, 1909, as correctly showing the installation of the Kane form of equipment as tested at Milwaukee; also identified the engine shown in the photograph as a Harvester Company six horse-power engine.

Witness identified the parts produced and shown him and offered in evidence as Plaintiff's Exhibits 14A, 14B and 14C, respectively, as the parts made by the Harvester Company and represented by Plaintiff's Exhibit No. 14. The four parts, with the addition of springs and paper pins and fastening devices, constituted, when put together, the entire equipment substantially like Plaintiff's Exhibit No. 12. The Webster Company furnished the springs.

Referring to the integral plug and bracket fastening, Plaintiff's Exhibit No. 14, the parts which fitted to the engine were always the same for the same engine, but different with different engines, nearly every size of engine, because of

the change in size, having its own size of plug. The supporting part, upon which the magneto generator proper was mounted, was always the same regardless of whether the engine was of the horizontal or vertical type. The same was true of the part represented by Plaintiff's Exhibit 14A.

Being shown a piece of apparatus offered in evidence as Plaintiff's Exhibit No. 15, witness said:

"Well, I am not sufficiently familiar with the details to know whether that is the particular form that was used on the vertical engine, or on the horizontal engine. All I do know is that this is the improved Milton magneto, and that

that is the particular form of plug which supported the 318 magneto, and which was placed in the engine in place of the regular standard plug of the engine."

Witness recognized the exhibit as the form or type of machine which was installed by the International Harvester Company following the adoption of that general style of machine.

Cross-Examination by Mr. Bulkley.

Witness is now engaged in private practice as a mechanical engineer—consulting engineer—and has been for three years past. Has not been directly connected with gasoline engines of the type involved in this case since leaving the Harvester Company but has kept in touch generally with the development of the art. Left the Harvester Company in 1913 or 1914.

Being asked to state more in detail or specifically the nature of the complaints which were received principally from abroad in connection with the old Milton magneto, witness said:

"The first and most important complaint was that the engine failed to start on the magneto. That was the general complaint. * * * The next and more nearly accurate answer would be that the spark was not produced. And the third would be that there was some mechanical difficulty by which the magneto did not work properly. The next would be that the magneto rotor stuck, or that the magneto itself would shift on the supporting boss, or that the adjustment which had been existing originally had been distorted and could not be put back in form. That would be the whole story, practically."

Witness discussed all of these points with the New Works Committee, many times.

Being asked whether, in looking over the letters and reports of the Committee, witness had observed any specific complaint other than the fact that it was difficult to support such a heavy magneto or fasten it securely on the engine cylinder, witness said:

"I had nothing to do with any reports of committees. The magneto would be returned to the factory, sometimes on the engine and sometimes independent of the engine, and practically in refusal of payment for the engine by the purchaser; and I would be expected to either fix it, or show how it could not be fixed. That resulted in my letter."—The letter of the witness dated March 15, 1909, Plaintiff's Exhibit No. 1.

With reference to the letter Plaintiff's Exhibit No. 1, the witness further testified:

"Q Now, referring to this letter, where you say the magneto when in place as at present designed is not sufficiently rigid and is not sufficiently secured to stand up properly under conditions of continuous operation, what do you mean by that?

A That means, that refers entirely to the mechanical construction of the magneto proper and its support.

Q Now, what do you mean by its support? What do you include within that term?

A I mean its location and support upon the boss of the engine.

Q That was not sufficiently rigid?

A No, sir, that was not.

Q And that was the means of connection, was it not, between the magneto and the engine cylinder?

A That referred to its location distant from the plug, with adjustable parts to and from the magneto."

Witness recalled experiments or tests made with what was known as the Wattles magneto and fixed the approximate date of the tests by a letter dated February 16, 1909, written by witness to the Experimental Department of the Harvester

Company, the letter after submission to the witness being marked for identification, Defendants' Exhibit No. 1.

Witness testified regarding the Wattles magneto, as follows:

"Q Now, tell us what the trouble was, if any, with this Wattles magneto which you tested.

A The Wattles magneto was of a different principle entirely from this Milton, in that it was operated by the compression gases within the cylinder of the engine, and the trouble with the magneto was that on account of heat and difficulty of lubrication of the little plunger or piston which he had for such operation, it was unreliable and would not work continuously satisfactorily.

Q Was that all the trouble about it?

A That was the principal trouble.

Q I asked you, was—

A And the only one that was called to my attention.

Q How was that Wattles magneto fastened on the cylinder?

A It is a good while ago, but if I remember correctly—If my recollection is correct, the plug was removed completely from the engine, and the Wattles magneto was inserted in its place. The plunger of the Wattles magneto was inserted in place of the plug.

Q Is it not true, Mr. Waterman, as you now remember, that in that Wattles construction the magneto was mounted on the plug?

A No, it was not mounted on the plug. * * * No, sir. The plug, I am quite sure, was removed completely, and the Wattles magneto was inserted in the opening which was vacated by the plug; that is, the Wattles magneto was operated by the compression of the cylinder; a plunger was inserted in place of the plug.

Q Now, disregard for a moment the manner in which the compression of the engine was operated. Is it not a fact that in the Wattles magneto the generator proper and the plug, with its electrodes, were connected together in one structure, and capable of being mounted on the engine as a whole, and taken off as a whole?

A Yes, sir. The Wattles magneto was a complete unit."

Witness shown another letter which he identified as having been written by him. Letter not marked for identification, nor date of it stated on record. Cross-examination in reference to the letter, the witness testified:

"Q Now that you have looked at that letter, Mr. Waterman, do you have some recollection as to what is mentioned in that letter?

A Yes, sir. That is a report of experiment work on that date.

Q That you reported in this letter? Now, I will call your attention to the next-to-the-last paragraph.

A Yes, sir. I remember that.

Q What did you mean there, by reference to the perfecting of the durability of the Wattles magneto?

A That means that Mr. Wattles personally was there at Milwaukee, working upon his magneto, and at the same time we were trying to overcome the difficulties of the magneto—of the Milton.

Q Well, what did you specifically refer to with respect to the durability of the Wattles magneto, which you were trying to perfect?

A On account of the heat, of the gases, the piston would become worn and leak, and the magneto would stop.

Q It had nothing to do, did it, with reference to the durability of the means by which the magneto proper and the plug were mounted on the cylinder?

A No, sir.

Q Now, with reference to the means of attaching the Milton magneto to the engine, which you were considering, what did that have reference to?

322 A Various means of support, had nothing to do with the general design of the magneto, at that time.

Q Did it not have to do, specifically, with the manner in which the magneto and the plug were to be secured to the engine cylinder?

A No, sir.

Q —As set forth in your letter of March 15th, Exhibit 1?"

Objection to line of examination as to Wattles and Wattles magneto being as not proper cross-examination. After discussion between court and counsel, witness excused with the understanding that he would be held available for examination by defendants as their own witness if desired by them.

WILLIAM L. CARLE called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 36, residence, 851 Wellington Avenue, assistant to the head of the department of the International Harvester Company of America known as Stock Division of the Sales Department. Connected with that department for past eleven years. Particular work of the witness to assist in compiling copy for instruction pamphlets for setting up and operating the machines that the company handles. Stated that he was familiar with the records of the company relating to instruction sheets and pamphlets. Witness shown a pamphlet having a title reading in part "Directions for Attaching the Milton Magneto to the International Harvester Company's Horizontal Gasoline Engine," and identified it as a pamphlet printed in his department but stated that the copy was probably prepared at the Milwaukee Works of the company. Stated that the type for the pamphlet was set up on September 22, 1909, or a few days later, and that the pamphlets were received 323 from the print-shop on the 16th of October, 1909 and 1,000 of them sent to the Milwaukee Works on October 21, 1909, which was the first shipment with the exception that a few might have been distributed around to the heads of the departments in the Harvester Building a day or so before.

Pamphlet offered in evidence as Plaintiff's Exhibit No. 16.

Witness fixed the dates given by him by data printed on the title-page of the pamphlet in its upper left-hand corner, and by original records produced by him, which records were made at time of the transaction inquired about.

EDMUND J. KANE called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 35, residence, 123 North Waller Avenue, Chicago; occupation mechanical engineer. Worked for Webster Manufacturing Company from sometime in the fall of 1908 until sometime in the fall of 1910. When he went to work for

the company it was called Webster Manufacturing Company. A little later it was changed to Hertz Electric Company, then it was changed to Webster Electric Company.

When the witness first went to work for the Webster Company he was employed by Mr. Webster as a demonstrator and salesman. The company was making magnetos at that time. The magneto was called a tri-polar construction with straight-bar magnets, and a coil on each pole-piece, on the center finger of the tri-polar construction. It was called the Milton magneto. Witness became acquainted with Mr. Milton. First met him either going to the Milwaukee Works of the International Harvester Company, or at the Works, not sure which. Milton was connected with the Webster Manufacturing Company when witness first went there, and was looked upon as the chief engineer. When witness 324 first went to the Webster Company he reported to Mr.

Webster and the latter turned him over to Mr. Milton, and Mr. Milton turned him over to Mr. Abbott Munn.

Asked to describe in a general way the form and style of the tri-polar magneto which the Webster Company was making when he first went to it, and the manner in which it was mounted for use, witness said:

"At that time our only, principal, customer, as I remember, was the International Harvester Company, and we were making the large square type of magneto. At the factory the Webster Manufacturing Company, they manufactured a magneto, bracket, springs, rotor and trip finger, and that was shipped up to Milwaukee to the International Harvester Company and they attached it to the engine."

Describing the method of attaching the magneto to the engine, witness said:

"The method of attaching it was by a small boss on the side of the cylinder. This boss was originally used to carry a small stud which supported a small roller, and the roller was for the purpose of supporting a trip rod which ran from an eccentric on the cam shaft of the engine and tripped a finger on the movable electrode of the igniter. The magneto was mounted on this small boss, and from what we called the trip finger of the magneto a rod or link extended over and engaged the finger of the movable electrode, and bolted on to the rear end of the cylinder was a small bracket that carried a lever. At the top end of the lever was a square rod that engaged the trip finger of the magneto. On the

bottom of this lever there was a connection that went to the eccentric on the cam shaft of the engine."

Being shown the piece of apparatus marked Plaintiff's

Exhibit 11, and asked to state what it was and what it 325 represented, witness said:

"Well, I see right off that this is the type of magneto that they were making at the Webster factory when I first went there; and the rest of this mechanism is, of course, the bracket that supports the magneto; and this portion here, that slid over the boss on the side of the cylinder and supported the magneto. This rod or link mechanism here connected with the finger on the movable electrode."

Witness stated that the movable electrode was missing from the exhibit.

Being shown the pamphlet marked Plaintiff's Exhibit 13, witness stated that it illustrated the method of attaching the magneto to the engine as he had endeavored to describe it. Witness first saw a pamphlet like Plaintiff's Exhibit 13 shortly after he started to work for the Webster Company—probably in 1908 or 1909. Witness stated that the large cut on the pamphlet showed the method of mounting or attaching the early magneto equipment to the engine. Witness saw the magnetos attached to engines in that manner and also went out to investigate the troubles and repaired magnetos attached in that manner. Regarding his duties in this connection, the witness stated that the magneto would be in trouble and the Webster factory would hear about it and send him out to fix it. That he made a number of trips but never devoted all of his time to that sort of work. It was sort of incidental. When the trouble came up if witness was available he would be sent out to attend to it.

Witness identified himself as the inventor named in the Kane patent No. 1,280,105 and stated that he invented the subject-matter of that patent. Asked to state the circumstances which led to the making of that invention he said:

326 "Well, as I said, I did a certain amount of field repair work on the old style magneto and attachments, and I also once in a while would go to the Milwaukee Works and find out how things were going up there, and I had a very strong opinion or idea—well, I had a very definite knowledge that they were very much dissatisfied with the type of attachment that they were using at that time. * * * I would go up and talk to their engineers and they would tell me—

The Court: Was it causing trouble?

A. Yes, causing a great deal of trouble. * * *

A. Of course, one of the great troubles with that old type of attachment was that it was a heavy weight supported on a very small boss which was never intended to support any such weight. * * *

A. That boss was originally intended to support a small roller, I would say, a couple of inches in diameter, and there was a half inch rod worked over the top of this roller and there was a very little strain on it.

Q. That was used for that purpose, was it, before the Milton machine was attached to the engine at all?

A. Yes, sir.

Q. It was something left over as a matter of prior engine design this boss? * * *

A. Yes."

Asked to state what other troubles if any were encountered with the original Milton machine, witness said:

"As I started to say, one of the great troubles was that mounting this heavy magneto on this little boss, it was not securely held in place, and after the engine had been operated a short time it would shake loose. That would put the relative timing of the spark in the magneto—the relative time that the points separate in the cylinder—it would spoil that relation, and of course the engine would not spark and 327 there was trouble. There was also a good deal of mechanism on this type of attachment, and if the man knew enough to keep his magneto tight on the engine, that is, if he should observe that it was loose and tighten it up and get the adjustment back again, why, the wear of all these various parts would put it out in another relation, so that on the whole we had a great deal of trouble with it."

Asked to state what he did and when he did it to overcome these troubles and difficulties, the witness said:

"Well, it is a little bit hard to say just definitely when the idea first came to me, but I have always placed it somewhere along in the early part of 1909. As I ran into these troubles I naturally sort of speculated and figured and tried to get a means or method of overcoming it, and really the first thing that I sort of observed was to take all that apparatus and cut out all this intermediate mechanism and bunch it all upon the plug there to make a good attachment.

* * *

The first thing that made me really start to work out some of the details of this device was that I saw a copy of that letter of Mr. Waterman's. I think it is the letter dated March 15th. And then, of course, I knew that things were very serious. And along sometime later than that I was upstairs, I think, on the fifth floor and Mr. Webster came up and asked me if I had any ideas or suggestions, or if there was anything that I could do to help him out in this situation. I told him I thought I could. That was, if I remember rightly, on a Saturday. I went home and the next day my father, Mr. Maurice Kane, sort of brought the proposition up and he said that the Harvester Company had pretty nearly come to a point that they were going to abandon the use of that magneto, unless somebody got busy and did something to overcome the trouble. I then sat down—I had a few drawing tools at home—and I made a sort of rough sketch which showed the magneto mounted on an extension of the igniter plug. This sketch I showed to my father when I 328 got it done, and we talked over it and we decided to take it down and show it to Mr. Webster. The next day I took it down and showed it to Mr. Webster, and Mr. Webster thought it a good idea. That same afternoon, if I remember rightly, we took it over to the general offices of the International Harvester Company, and showed it to Mr. Cavanaugh, who was assistant general manager in the Experimental Department. Mr. Cavanaugh looked at the sketch and said he thought we had made a real improvement, and to help us to put this thing actually in metal he immediately shipped us a six-horsepower engine. I then went back to the factory of the Webster Manufacturing Company and started to make a working drawing embodying this idea. This drawing was made a few days later and then we immediately started to make up various pieces to make that attachment to put on a six-horsepower engine."

Concerning the drawing referred to in the preceding answer, witness further testified:

"Q. I show you a paper, and ask you to state if you know what it is.

A. It was the original sketch that I made at home on that Sunday afternoon.

Q. What was the date upon which you made that sketch?

A. Well, it is dated April 11th. I am pretty sure that

is the date I made the sketch, because it is a habit of mine to date all these drawings.

The Court: 1909?

A. 1909.

Mr. Williams: Q. Is that the sketch which you have just referred to as having been shown first to your father, then later, I believe, to Mr. Webster, and then to Mr. Cavanaugh?

A. This is the sketch that I referred to.

The Court: When did you put the figures on?

A. I think I put them on at the same time.

329 Mr. Williams: Q. That is, you think you put on this legend 'E. J. Kane, April 11, 1909' on that date; put it on that paper on April 11, 1909?

A. Yes, I am quite sure. I think I did that at the suggestion of my father, if I remember rightly.

Q. Your father?

A. He told me 'Always date your drawings and sign them.' "

The paper identified by the witness offered in evidence as Plaintiff's Exhibit No. 17.

Being further examined, the witness testified:

"Q. I call your attention now to another paper, I will ask you to state what that is.

A. This is a second drawing that I referred to in my previous testimony, which I made at the Webster Manufacturing Company, and shows fully all of the details of the attachment.

Q. Now, can you say when it was that you made that drawing?

A. Well, there is a legend on there, on the corner, which says 'April 14, 1909.'

Q. Is that in your handwriting?

A. Well, it is in my hand-printing. It is printed.

Q. Do you know when that was that you put that date on that drawing?

A. I would say that it was at that time.

Q. On that date?

A. On that date, April 14, 1909.

Q. Now, on this drawing which you have just identified as having been made at the Webster plant by you, on or about April 14, 1909, there are numerals in red lead-pencil. Were those figures put on the drawing by you at that time, or

can you explain how or when they came to be upon that drawing?

A. Those figures were not put on there by me at that time. I put those figures on when we were taking the testimony for the Milton interference.

330 Q. In connection with your testimony as given at that time?

A. I put the figures on so that we could describe those pieces of the apparatus and tell what the various parts were."

The drawing last identified by the witness offered in evidence as Plaintiff's Exhibit No. 18.

Being further examined, the witness testified:

"Q. I call your attention now to a piece of apparatus marked Plaintiff's Exhibit 12, and ask you to say if you know what that is.

A. Well, this is the Milton magneto attachment as put, I would say, on the International Harvester Company horizontal engine.

Q. When was it that you first saw a piece of apparatus like that, or substantially like this Exhibit 12?

A. Well, I saw a piece of apparatus very much like this sometime in the latter part of April or the first part of May, 1909.

Q. Did you see that made, or have anything to do with the making of it, or what were the circumstances?

A. Well, I made the drawings for the pieces and Mr. Abbott Munn, foreman of the Magneto Department at that time, he made most of the pieces.

Q. Whose Magneto Department?

A. Of the Milton Magneto Department.

Q. For the Webster?

A. The Webster Manufacturing Company.

Q. Did you have anything to do with the construction of that yourself?

A. Not very much, no.

Q. Did you see the work in progress?

A. I watched the work in progress but I didn't do very much of the manual work on it.

Q. You said that the International Harvester Company had sent a six-horsepower engine through Mr. Cavanaugh in order that tests might be made. Were tests made eventually of that engine?

331 A. As I said, sometime in the latter part of April

or the first part of May we completed a device very similar to this and we put it on that engine and we proceeded to make some tests.

Q. How was the test made; you saw the test, did you?

A. Well, I really ran the test.

Q. What did you do in making those tests?

A. Well, the tests didn't amount to very much, because we put this attachment on an engine, and I think the first or second time we turned the engine over it started and ran, and all the parts, so far as we could tell at that time, operated perfectly.

Q. Did the engine keep on running?

A. Oh, yes, it kept on running, and the mechanism for cutting out and rendering the magneto idle, that all worked; the whole thing seemed to be a good job.

Q. Now, I notice that there are some slight differences apparently between some of the sizes or between size forms of some of the parts as between Plaintiff's Exhibit 18, drawing, and this Plaintiff's Exhibit 12, apparatus. Can you say whether the first piece of equipment of this general character conforms more nearly with the drawing or with this Exhibit 12, sample?

A. There were some slight differences. The first attachment that we ever made up followed this drawing very closely. When the engineers at the Milwaukee Works of the International Harvester Company started to make up plugs for a full line of engines they put in some slight changes.

Q. Won't you state what those slight differences were as between the drawing Exhibit 18 and the apparatus Exhibit 12?

A. Well, the main difference between this piece of apparatus and this drawing is this small lever, for instance (indicating). This is used to lift the magneto push-rod out of engagement with the trip-finger. The original apparatus that we took up to Milwaukee, in that it was accomplished a little bit differently. This lever was not here, but there was a small connection, a small casting on the exhaust rod, bolted to the exhaust rod, and there was a little roller on the top of that, and on the bottom of the magneto push-rod was a wedge, so that when the exhaust rod was held forward on the idle strokes of the engine, the roller came under the wedge and lifted the magneto push-rod out of engagement with the trip-finger. Outside possibly

of some small differences in the thickness of the metal and that sort of thing, that is the only difference between this piece of apparatus and that drawing.

Q. Have you got, or do you know whether there has been preserved in any way, that original machine which was made in conformity with Plaintiff's Exhibit 18, drawing? Do you know what became of the original model?

A. I took the original machine that was made from this drawing to the Milwaukee Works of the International Harvester Company.

Q. What did you do with it there?

A. I gave it to Mr. Waterman.

Q. Did you see it at all after that?

A. If I recollect rightly Mr. Waterman turned it over to some of his assistants, and they put it on an engine. In the meantime Mr. Waterman, I think, took us around and showed us some of the cream separators and that sort of stuff in the factory, and after we saw those things we went out to the testing floor, I think it was, and we saw the magneto in operation on the engine.

Q. Who were present at the time you delivered this first magneto to Mr. Waterman, aside from yourself and him?

A. My father, Mr. Maurice Kane.

Q. Was he in business there at Milwaukee, or how did he come to be present?

A. At that time my father was general manager of the Experimental Department of the International Harvester 333 Company and when I told him I was going to take this new improved attachment up to the Milwaukee Works he said he would go up with me, of which I was very glad.

Q. What was said at the time of your interview with Mr. Waterman, at which you showed him for the first time this machine that you have described?

A. Well, we went into Mr. Waterman's office and I laid the machine on his desk and Mr. Waterman looked it over. He said 'Well, I think you finally have done something.' He may have said more, but I don't remember just exactly all that he said. I know that he pronounced this apparatus a good job and was very much pleased with it.

Q. By the way, was it that same day, or some other day, that you saw it put on the engine there at the Milwaukee Works?

A. I did not see it put on the engine. He gave it to his assistants and they took it out and put it on the engine.

Q. And you saw it after it was on the engine?

A. Afterwards we went out and looked at it.

Q. That is the same day?

A. That is the same day.

Q. Did you see the engine run there with this ignition equipment on it?

A. The engine was running.

Q. How long did you stay there in Milwaukee in connection with this test?

A. We came back to Chicago that same night.

Q. I call your attention now to the paper dated March 15, 1909 marked Plaintiff's Exhibit 1, and I will ask you whether you recognize that paper.

A. I don't think I ever saw this paper before, but I am very sure that I have seen a copy of this.

334 Q. When did you first see a copy of that paper?

A. Well, I cannot say exactly, but it was sometime, I would say, shortly after it was written.

Q. By shortly, do you mean within a week or month or year?

A. Within probably a week or ten days.

Q. Now, you referred during your testimony to having seen a letter of March 15th. How does this compare with the letter which you then referred to as having been seen by you?

A. As near as I can tell the letter that I saw was a copy of this.

Q. Now, following this visit to Milwaukee, when you first submitted this invention of yours to Mr. Waterman, did you go again to Milwaukee in the immediate future, in connection with any tests of that equipment?

A. I cannot place any definite visit, to say that I went up at such and such a time; but I used to visit the Milwaukee Works quite frequently. It was kind of my business after I went up the first time to keep in touch with the progress of the Milwaukee Works in the making of this new attachment, and there is no doubt in my mind that I did go up there every once in a while to see what they were doing.

Q. What was the further history of this invention of yours, after having submitted it, as you say, to Mr. Water-

man, and it having a test there at the Harvester plant in Milwaukee? What followed that in a general way?

A. Well, the next development was, of course, the making of the magneto attachment to put on the six-horsepower engine, to replace the one that I had taken to Milwaukee. Shortly after that I went over to the Deering Works and I made up one of these attachments for a tractor engine. This differed a little bit from what we called the standard attachment at that time, in that the tractor engine was a variable-speed engine, and I made a sort of double eccentric arrangement to advance and retard the spark of the magneto as the speed of the engine would vary.

Q. What followed insofar as the Harvester Company was concerned, after the thing went on test up there?

A. Well, after the thing went on test the next thing that I heard of was, I think, that I saw a report by Mr. Waterman on this attachment, and if I remember rightly it was quite favorable to the attachment. A little later I heard that they intended to adopt it as an attachment, discard the old means of attaching the magneto to the post—

Mr. Bulkley: I object to what he heard.

Mr. Williams: From whom did you hear those things?

The Court: That may be stricken out, what he heard about it.

Mr. Williams: Let me ask you first what followed that? What I want to get at is the history of this invention of yours, following its submission to the company. Now, just in a general way state all that followed.

A. After we submitted it to the Milwaukee Works, as I said, I saw a copy of the report that was quite favorable to the magneto, and a little bit later I think we shipped up about ten magnetos to the Harvester Company at Milwaukee. They said they wanted to put them on an attachment similar to the one I had taken up there for a general test. Shortly after that we started to make this small type of magneto with the circular pole-pieces, and started to ship a large number of them up to the Milwaukee Works. As near as I can recollect we started to ship it up there some time in August or September, 1909.

Q. In what quantities, or approximately what quantities?

A. I think possibly 25 or 30 a day.

Q. Now, what followed as to the commercial use of this device after you began to ship it in these quantities to

336 the International Harvester Company in August or September, 1909. Did you continue to ship it or did you discontinue?

A. We shipped them, continued to ship.

Q. For how long?

A. As long as I was with the Webster Manufacturing Company they continued to ship this type of magneto.

Q. When was it you severed your connection with the company?

A. It was in September, 1910.

Q. I call your attention to the paper which has been marked Plaintiff's Exhibit 4, and ask you to state if you can what that is.

A. This is the original letter of which I saw the copy shortly after I took the first magneto attachment up to the Milwaukee Works.

Q. And is that the favorable report to which you referred earlier in your testimony as having seen a copy of it?

A. Yes this is that report that I referred to.

Q. I call your attention to a photograph which has been marked Plaintiff's Exhibit 5, and I will ask you whether you recognize that, and, if so, to explain what you know about it.

A. This photograph as near as I can tell, is a photograph of the first magneto that we attached to the six-horsepower horizontal engine at the Webster Company. So far as I know there was only one magneto, possibly two, with a means of rendering the magneto idle on the idle strokes of the engine, in which the means was separate from the magneto. I see that in this photograph.

Q. Now, this first drawing of yours dated April 11, 1909, as I understand from your testimony, was shown by you to your father and to Mr. Webster, and to Mr. Cavanaugh. Now, were there any others, so far as you recall, who saw that drawing at or about the time that it was made, or within a few days thereafter?

337 A. Mr. Cheville came up to look at it.

Q. Now, this more detailed drawing dated April 14, 1909, can you say who saw that at or about the time it was made?

A. Well, at the time it was made Mr. Munn saw it. In fact he watched me from time to time as I worked out the details of the mechanism. Right after the drawing was com-

pleted and in the shape you see it now I took it down and showed it to Mr. Webster. Of course, it was set up on my table on the 5th floor of the Webster Manufacturing Company and anybody could have come in and looked at it.

Q. Did you discuss the drawing with anyone other than Munn during the time it was being made, or on its completion?

A. At the time I was making the drawing Mr. Munn was the only one I spoke to at all about the idea. After the drawing was made and I took it down to Mr. Webster he asked me if I showed it to Mr. Milton, and I said that I didn't think Mr. Milton had seen it, and he said 'You better take it over and show it to him,' and if I remember rightly I took it over then and showed it to Mr. Milton.

Q. Do you know what work Mr. Milton was engaged in principally or exclusively at about the date of this drawing?

A. About the time I worked on this drawing Mr. Milton was engaged working largely on the high tension magneto.

Q. Did you see him frequently at that high tension work at about this period? Do you know of your own knowledge what he was doing?

A. No, I would not say that positively.

Q. Did you see him at work, ever, during this period, say, in April, 1909?

338 A. I used to see Mr. Milton once in a while, up on the 5th floor where I was located, and he would take a high tension magneto which was generally made by Mr. Munn and he would run tests on it. From that I assumed that he was working largely on the high tension magneto stuff.

Q. Will you look at this pamphlet, marked Plaintiff's Exhibit 16, and state whether you recognize that? If so, what is it?

A. This paper you have handed to me, marked Plaintiff's Exhibit 16, I recognize as an instruction paper for attaching the Milton magneto to the International Harvester engine.

Q. When did you see a pamphlet identical with this for the first time?

A. I saw pamphlets identical with this one for the first time shortly after the printer's proof of this thing were got out.

Q. Did you see the proof before you saw the finished pamphlet?

A. Well, I went down to look over this thing—I went down to the Harvester Company one day to look over this

thing with them, to read it through to see that it was correct so far as the attaching and the general descriptive matter that related to the magneto was concerned, and they wanted to get my opinion on it, and I looked it through with Mr. Chelius.

Q. That was before the pamphlet was actually published then?

A. I would say yes.

Q. When was it you first saw the pamphlet in this final form for the first time; approximately when?

A. That was shortly after they were published.

Q. Can you state approximately when that was?

A. Some time in the fall or early winter of 1909.

Q. Now, how does the ignition mechanism as illustrated and described in this pamphlet, Plaintiff's Exhibit 16, compare with the ignition equipment which you have described as having been made following your invention, and as tested at Chicago and at the Milwaukee Works of the Harvester Company?

A. The only difference between the attachment described in the pamphlet there from the one we made at Chicago and the one that I took to Milwaukee is in the means of rendering the magneto inoperative on the idle strokes of the engine. On the one that I took to Milwaukee that means was not mounted on the magneto bracket proper. It was separate from it. But after the engineers at Milwaukee looked over the thing they thought it made a little simpler attachment to put a small lever for raising the magneto push-rod out of engagement with the trip-finger on the bracket itself.

Q. Won't you apply a reference-letter, "A" on illustration No. 4 or 5, or both, on this pamphlet, to the part to which you say differs in these cuts from the form which you tested in Milwaukee and Chicago for the first time? You have marked that lever now with a capital "A" in those cuts?

A. Yes, sir.

Q. Now, aside from the difference as to the form or location of that mechanism which you have marked "A" on those cuts, how did the apparatus which you first tested in Chicago and Milwaukee compare with that illustrated in this pamphlet, Exhibit 16?

A. Well, it was practically the same, except, maybe, for some small difference in the dimension of the parts and possibly the material that was used in some places. If I remem-

ber rightly the first trip-finger that we made for an attachment of this kind we made out of a forging because we were in a hurry, but after they got the apparatus up to Milwaukee and we decided to make them in quantities we made that trip-finger out of malleable iron.

Q. I call your attention to Plaintiff's Exhibit 14 and ask you whether you recognize that, and if so, to state what that is.

A. This mechanism you have handed to me I recognize as an igniter plug and magneto bracket as used on the 340 International Harvester Company horizontal engine.

Q. Can you say whether or not that is a commercial product, or whether that is a hand made preliminary sample?

A. I would say that this is a commercial product.

Q. Wherein did the first device which you made, as you say, following this drawing of April 14, 1909, differ, so far as the integral plug and bracket are concerned from this apparatus marked Plaintiff's Exhibit 14?

A. The only difference between this bracket and the one that I took up to the Milwaukee works, so far as the integral plug and bracket is concerned, is that this one is a little lighter; there is not quite so much metal in this one as in the one that I took up there.

Q. Look at Plaintiff's Exhibit 14-A, and state, if you can, what it is, and compare it, if you can, with the apparatus which was first made and taken to Milwaukee for this test.

A. This piece you have handed me is a trip-finger, and the only difference between this one and the one that we took up to Milwaukee was that this is made, I would say, out of malleable iron while the one we took up to Milwaukee was a forging.

Q. Can you say how it was that this unfavorable report of Mr. Waterman's dated March 15, 1909 first came to your attention? Do you know who called your attention to the copy of that report which you saw?

A. I think I first saw a copy of that report—I think a copy of that report was first brought to me by my father. I think that was the first time that I saw it.

Q. Now, when you talked to Mr. Webster about the troubles which were being met with in the old form of Milton machine what did he say and what did you say?

A. Mr. Webster merely requested me to try and help him a little bit.

Mr. Bulkley: May I ask that he state definitely what
341 Mr. Webster said to him and what he said to Mr. Webster?

The Court: The substance of it.

A I was up on the 5th floor and Mr. Webster simply came into my little place in the Stock Room, a sort of caged off place up there, and he spoke something about the seriousness of the trouble they were having, and he seemed greatly worried and he said 'Kane, you have had a great deal of experience with these things. Can't you give us some idea,
342 or help us a little bit on this proposition?', and I said

I thought I could, that was about all, as I remember it, that was said.

Mr. Williams: Q. Perhaps, Mr. Kane, you had best refer to this drawing of yours bearing date April 14, 1909, and making use, if you will and if you find it convenient, of the red letters there, just state what the several parts are, indicating so far as you can the mode of operation of the mechanism there shown.

A. On this drawing No. 1 is the engine cylinder. No. 2 is the igniter plug with the extension integral with the plug. No. 3. Mounted on No. 3 is the magneto—I was going to give the number, but I don't see it. No. 4 is the trip finger. No. 5 is the rotor shaft. No. 6 are the springs which engage the trip-finger on one end, and two studs in the pole-piece No. 7 on the other. No. 8 is a finger on the movable electrode No. 9. No. 10 is the adjusting screw in the trip-finger No. 8. No. 11 is the magneto push-rod. No. 12 is a wedge-shaped cam mounted on push-rod No. 11. No. 13 is a roller which supports the push-rod No. 11. No. 14 is a small shaft carrying roller No. 13. No. 15 is a small handle on the other end of shaft No. 14. No. 16 are the magneto coil. No. 17 is the magneto rotor. I might add that No. 14 in addition to being the shaft had an eccentric motion.

* * * * *

Q. Now, Mr. Kane, after this machine or your invention which you have described had been approved and adopted commercially by the International Harvester Company, what was said and done relative to the matter of procuring protection on that invention?

A. Some time after I made the first machine, I would say probably a couple of months, Mr. T. K. Webster came up to the 5th floor where I was working at the Webster Company,

and he talked the matter over with me. He told me that
343 he had discussed the matter of the patentability of this
device with his patent attorneys—his engineers—and
that they were of the opinion that there wasn't anything new
or patentable in the attachment.

Q. Were you satisfied with that opinion? What did you
do?

A. Well, I didn't think very much about the matter just
at that time. A little bit later my father, Mr. Maurice Kane,
he asked me what the Webster Manufacturing Company
were doing about getting the patent on this attachment, and
then I repeated to him what Mr. Webster had told me. He
said—well, he said 'You had better go down and see Sprinkle'
—of Brown, Nissen, and I think it was Hopkins at that time.
He said 'You go down to see them, and you have Sprinkle
make out a patent application for this device.' He said
'I do not know whether there is anything patentable in it or
not; but,' he said, 'you at least will get some patent experi-
ence and you ought to have some information along that line

Q. Who met the expenses of the patent application when
it was filed.

A. I did.

Q. Personally?

A. Personally.

Q. Did you say anything to the Webster Company, to
T. K. Webster or anyone connected with it, about the fact
that you had filed this application through Mr. Sprinkle?

A. No, sir, I did not.

Q. How old were you Mr. Kane, when you went into the
employ of the Webster Company?

A. I was 25 years old.

Q. What mechanical or other business or manufacturing
experience had you had previous to going into the employ
of the Webster Company?

A. Why, we have a work shop down in our basement,
and we have had for perhaps twenty years. We have got

quite a few mechanical tools down there and have made everything from a small gas engine to a big cruising motor boat.

Q. Who? When you say 'we' made everything from a motor boat to cruisers?

A. Myself and my brothers. I also spent—am a graduate of the Lewis Institute, a technical school in Chicago. I got a degree of Mechanical Engineer from them in 1907. I also spent one year with the Smurr & Kamen Machine Tool Company. They were located at that time on South Clinton Street. They made screw machines and drill presses, wire working machinery; built special machinery. After that I entered the employ of the Webster Manufacturing Company.

Q. How long a time elapsed after your graduation from the Lewis Institute before you accepted employment with the Webster Company?

A. I graduated from the Lewis Institute in 1907. I went to work for the Webster Electric Company in 1908.

Q. When was it in 1908 that you went into the employ of the Webster Company?

A. Sometime in October.

Q. Now, what did you do in connection with the employ with this Webster Company when you first entered its employ? What were your duties?

A. I was placed under the direction of Abbot Munn, and under his direction was put through all the processes of making the various parts and assembling the magnetos. The idea was to thoroughly familiarize me with the magneto and how it was made. I wound coils, I painted magnetos, I assembled magnetos, I did work on the drill press, and in fact I learned how to do pretty near all the operations that were connected with the manufacture of the magneto.

Q. Who was it put you under the direction of Mr. Munn, as you say?

A. Mr. Milton.

Q. Did you see him first when you came into the employ of the Webster Company?

A. No, sir. I saw Mr. T. K. Webster.

Q. And how soon after you entered the employ of the Webster Company did you see Mr. Milton?

A. I think it was the same day.

Q. What did he say to you when he turned you over, as you testified on the direct, to Mr. Munn?

A. I think he introduced me to Mr. Munn and Told Mr. Munn that he wanted me to learn all about the manufacture of the magnetos.

Q. You say that Mr. Milton was known about the business of the Webster Electric Company as the Chief Engineer, is that right?

A. Yes, sir.

Q. Well, what authority did he have as chief engineer in connection with the business of that corporation?

A. Well, he seemed to have most of the authority.

Q. That is, he was the superior to whom you had to ultimately refer matters, was he not?

A. He was the superior to whom I at first referred matters.

346 Q. Well, when did it come about that he ceased to be your superior to whom you did refer matters?

A. Well, at times Mr. Webster would come up and give me orders direct after I had been there sometime.

Q. How long had you been there when Mr. Webster first came around and gave you orders direct?

A. I should say possibly three or four months.

Q. Well, now, what was the first thing in connection with the business of the company that Mr. Webster gave you orders direct on, if you now remember?

A. As near as I can remember, it related to some of the details of a trip I was to make in the interests of the Webster Company.

Q. Well, now, I am going to ask you when it was that you first proceeded to act on your own initiative with regard to the mechanical department of the work of the company, and not details of trips. When was it you first acted on your own initiative with reference to such a matter as that after you had entered the employ of the Webster Company?

A. Well, after I stopped working for Mr. Munn and worked for Mr. Webster and Mr. Milton I did very little or no work on the mechanical details at the factory.

Q. How long would you say you were working in and about those things which would give you a knowledge of how to assemble the magnetos, and in connection with that to learn the mechanical construction? How long a time were you doing that after you entered the employ?

A. I should say three months.

Q. And during that period you were under Mr. Munn, as I understand?

A. Yes, sir.

347 Q. Had been turned over to him by Mr. Milton?

A. I was, sir.

Q. Were you turned back to Mr. Milton again after that?

A. Well, I sort of wandered around loose after that for awhile.

Q. Well, who was your superior after the end of that three months and to whom did you look for your orders and instructions after you were around loose, as you say?

A. I looked to either Mr. Milton or Mr. Webster.

Q. And what were you doing when you were working around loose, after the expiration of this three months, when you were released from the superior authority of Mr. Munn?

A. Well, sometimes I would help Mr. Munn a little bit.

Q. Now, how long did that condition of affairs exist when you were, as you say, working around loose under the instructions of Mr. Webster and Mr. Milton?

A. That condition of affairs existed until after I designed the integral plug construction here.

Q. Well, what time was that, Mr. Kane? I ask if you know what time that was. You know when the integral plug—

A. That was sometime in April—

Q. —as you say, was designed by you. In what year?

A. 1909.

Q. Now, will you give me the time?

A. Some time in April 1909, sir.

Q. Then from and after three months, during which you were with Mr. Munn, up to the time when, as you say, you designed this apparatus, which was in April, 1909, you were under the instructions and supervision of Mr. Milton and Mr. Webster, is that correct?

A. Yes, sir.

348 Q. What were you doing during that period?

A. Well, I made several trips out into the country.

Q. Now, what were the nature of the instructions which you got from Mr. T. K. Webster, generally speaking?

A. Well, of course, we were trying to introduce and make popular the Milton magneto in this country, and I went out and visited the various general agencies of the International Harvester Company with that in view; and the instructions

I got from Mr. Milton and Mr. Webster related to the way I should endeavor to handle the proposition when I got out and interviewed the general agents.

Q. Now, did you get any instructions from Mr. Milton at any time during that period, after you had retired from the supervision of Mr. Munn, with respect to any mechanical matters connected with the business of the Webster Company?

A. No, sir, I did not.

Q. Then, I understand, Mr. Kane, that during this period when you were engaged in going about and drumming up business and meeting the agents throughout the territory that you got your instructions what to do, and advice and suggestions concerning those matters, from Mr. Milton and from Mr. Webster, is that right?

A. Yes, sir.

Q. And that during that period and up to the time when you took hold of the development of this apparatus, as you say you did, you had not been doing anything of a mechanical nature in connection with the business of the company, is that right?

A. Very little.

Q. Very little. Well, you say you had been doing a little. What was that little, if any?

A. Mr. Milton was doing some work on a magneto attachment of his own, and when he would make up an attachment he thought was an improvement over the old attachment, 349 why, at times he would send me up to Milwaukee with it.

Q. How often did that occur, when you went to Milwaukee at the instance of Mr. Milton with reference to this attachment which you say he, Milton, was working upon?

A. Probably a couple of times.

Q. What did he send you up there for?

A. Sent me up there to take it to the Works to show it to them.

Q. And did you take it to the Works and show it to them?

A. Yes, sir, I did.

Q. At Milwaukee?

A. At Milwaukee.

Q. Now, what was the nature of this device or attachment or apparatus that you say Milton was working upon that you took up there to show to the Milwaukee people?

A. Well, it is a little bit different from anything we have got here. It was a magneto mounted on the boss, on the side of the cylinder, where this old type was mounted. There was a connection from the magneto to the plug, which was separate. It differed from this attachment, however, mainly in the fact that the lever, which was mounted on the back of the cylinder, was eliminated, and Mr. Milton come out from the eccentric on the exhaust shaft to a link which was hung on one side of the bracket, magneto bracket. There was a trip on this rod and this trip engaged a magneto trip which hung downward from the magneto itself.

Q. What was this apparatus designed to do? What was it for?

A. Designed to furnish a spark for a gas engine.

Q. To whom did you show it when you got to Milwaukee on the two occasions when you went there with it?

A. I showed it to a man named Andrews.

350 Q. Do you know who Andrews was, what his employment was, and with whom he was connected?

A. Andrews, I understood, was the chief draftsman for the Milwaukee Works of the International Harvester Company.

Q. Did you explain it to him or say anything to him about it, or simply deliver it to him?

A. I delivered it to him and explained it to him.

Q. And explained to him how it worked?

A. Yes, sir.

Q. Did you have any instructions from Mr. Milton, or anybody else, to deliver it to Andrews particularly?

A. No, sir, I did not.

Q. How did you happen to deliver it to Andrews instead of to somebody else?

A. Well, I went up to the Milwaukee Works and went to the man at the door, and I told him what I wanted and told him what I was up there to do, and eventually I got hold of Mr. Andrews.

Q. All right. What did you tell him you were up there to do?

A. I told him I had brought a new magneto attachment from the Webster Manufacturing Company.

Q. Now, did this magneto attachment have anything to do with the generator or magneto proper, and, if so, in what respect? The electrical phases or features of the magneto

itself, what did this attachment have to do with that, if anything?

A. The electrical phases or features of the magneto itself were very much similar to the electrical phases of the previous type.

Q. Now, on the occasion of your second visit up there, or trip, as you say, who did you see then?

A. I saw Mr. Andrews.

351 Q. And what—the same man?

A. The same man.

Q. And what did you show him then?

A. Well, I had a little different type of magneto at that time.

Q. Well, what was the difference?

A. Well, instead of having one link attached to the magneto bracket on which was supported one end of the magneto push rod, we put in two links and a short connecting link or bar on which we hung the magneto trip, and then from the link that was nearest the flywheels of the engine we connected our rod which fitted into the magneto eccentric.

Q. Did you have anything more to do with these attachments, these two that you spoke of, except to take them down there and show them to Andrews at the request of Mr. Milton? Did you have anything more to do with these things than that?

A. Very little more.

Q. Well, what little more, if anything, Mr. Kane, if you remember?

A. I possibly showed Mr. Andrews how they went on the engine.

Q. Did you have anything to do in assisting Mr. Milton in the development of these devices or this apparatus?

A. No, I did not.

Q. Had you ever seen them before he delivered them into your hands on the respective occasions you made the trips to Milwaukee; had you ever seen them before that, either one of them?

A. Yes, sir.

Q. Where did you see them?

A. I saw them in the factory of the Webster Manufacturing Company.

352 Q. Did Mr. Milton explain them to you or tell you about them then?

A. No, sir, he did not.

Q. He did, however, explain to you how they were worked, and what they were for, just previous to sending you down to Milwaukee to take them there to show them to the International Harvester Company, didn't he?

A. No, sir, he did not.

Q. How did you learn about it?

A. They put these magnetos on an engine, and, if I recollect rightly, this engine was down on the—

Q. Who? Who, may I ask, Mr. Kane?

A. Somebody in the factory.

Q. In the Webster factory?

A. In the Webster factory. I couldn't tell you exactly the workmen; who put the magneto on the engine, and the engine, if I recollect rightly, was down on the test floor of the Webster Manufacturing Company. They made gas engines of their own at that time. And there was an old man in charge there, and he showed me what there was to be known about the magneto.

Q. What did Mr. Milton tell you to do when he gave you these attachments and sent you to Milwaukee with them? What were his instructions to you?

A. He told me to take them up to Milwaukee and, if possible, have them put them on an engine for test.

Q. Now, after you had served your three months' apprenticeship in familiarizing yourself with the magneto as it was then constructed, under Mr. Munn, as you say, did you have anything else to do with the mechanical affairs of the corporation, except that which you have just recited, up to the time when you got up, as you say, this combined plug and magneto?

353 A. I had a little, yes.

Q. Well, what was the little?

A. There was an old drawing board upon the fifth floor where I was located with Mr. Munn, and sometimes Mr. Munn had a little sketch made of some sort of little piece of machinery they were going to make, and I used to make it for him. If he waited until he could get the main engineering department downstairs to make this little piece or little sketch for him, why, it would take a good deal of time, and once in a while I would do it for him.

Q. What did these sketches which you made for Mr.

Munn,—what did they relate to? What was the character of the sketches?

A. Well, sometimes they would relate to some piece Mr. Munn wanted to put on a magneto, or sometimes they would relate to some piece of a jig or tool, or some little thing like that, they wanted to make up.

Q. Were you out considerably from the premises of the factory, out of town, going around and seeing these agents quite a good deal from time to time?

A. Yes, sir, I think I was.

Q. And you were going out of town on these general duties during the year 1909, were you not?

A. Yes, sir.

Q. And you frequently went out of town?

A. Yes, sir.

Q. And that was the burden of your work, wasn't it, to go out of town, to go around to see these agents and others to demonstrate this apparatus?

A. Yes, sir.

Q. And to straighten things out as best you could, and to create an interest in the product?

A. Yes, sir.

354 Q. Now, when you had a talk with Mr. Webster, as you say, did he say that he had enlisted the efforts of anybody else except you to help him out?

A. You mean on this work?

Q. On this invention which you are now claiming as having been made by you?

A. You mean the time Mr. Webster—

Q. Let me put this to you, put a more definite and clearer question. Mr. Kane, you have testified, as I understand it, that Mr. Webster came to you and said that he was having trouble with the form of magneto which was then being made and sold, and that the Harvester Company wouldn't have it any more, and that you had got to do something, and he asked you to help him out, is that right?

A. Yes, sir.

Q. Yes. Now, when was that? What month of 1909 was that when you had that conversation with Mr. Webster?

A. That was in April, 1909.

Q. Well, what part of the month, as near as you can remember?

A. As near as I can remember it, it was the day before I made this drawing.

Q. The day before?

A. Yes, sir.

Q. Did he tell you that he had asked or enlisted the help of somebody else other than you?

A. No, sir, he did not.

Q. Didn't say anything about that to you at all?

A. No, sir.

Q. Now, you made this drawing how soon after you had that conversation with Mr. Webster?

A. I made it the next day.

355 Q. In the forenoon or in the afternoon of the next day?

A. To the best of my recollection, in the afternoon.

Q. And when did you show it to Mr. Webster?

A. I showed it to Mr. Webster the following morning.

Q. Did you show it to Mr. Milton?

A. I do not think so.

Q. Do you know whether you did or not show this drawing to Mr. Milton?

A. No, sir, I did not show it to Mr. Milton.

Q. You were acting under his instructions at that time, weren't you, when you made this thing, as you say?

A. No, sir, I was acting under Mr. Webster's instructions.

Q. Let me go back a little. When was it you ceased to act under Mr. Milton's instructions and acted only on the instructions of Mr. Webster?

A. After I made this drawing.

Q. How soon after you made the drawing did you change your allegiance from Mr. Milton to Mr. Webster? How soon after did the relation which you had therefore had to Mr. Milton as your superior cease and you came under the supervision entirely of Mr. Webster, as you now say? How soon after you made this drawing?

A. Shortly after I made this drawing Mr. Webster had a little talk with me and said he thought he had found the right man on the low tension business, as Mr. Milton was busy working on the high tension business; and after that I didn't consider I was under Mr. Milton's instructions.

Q. Didn't you think Mr. Milton might be interested in

your invention, and it would be a good thing to show it to him as soon as you had made it, or shortly thereafter?

A. No, sir, I didn't think about that.

Q. Why not? Don't you think that would have been
356 a natural thing to do?

A. Well, Mr. Webster was the big man in the company, in my estimation.

Q. He didn't tell you not to show it to Milton, did he?

A. No, sir, he did not.

Q. Well, now, Mr. Kane, there wasn't any strained relations between you and Mr. Milton, was there, at that time?

A. Well, there was a little bit of feeling between the department upstairs and the department downstairs, I would say.

Q. What was the character of that feeling, as you say?

A. Well, I do not recollect just exactly what happened, but I know we were a little bit at outs.

Q. I am asking you as to your feeling and attitude toward Mr. Milton at that time, and not as to the attitude and feeling existing between different departments.

A. My attitude toward Mr. Milton, I think, went back to this fact; on a trip sometime previous to this time—it was quite a long trip. I went up North to Minneapolis, and then swung down to Des Moines, and I think to Dubuque a lot of those agencies out there; and Mr. Milton was to furnish me with funds. I didn't start out with very much money. The funds didn't come, and finally I got as far as, I think it was Lincoln, and I was stranded there with practically no money on the first long trip I had made from home, and I resented that very much.

Q. You knew the company was kind of hard up at that time, didn't you?

A. Yes, sir, I did.

Q. And you charged that up to Mr. Milton personally, did you, as though he was the one who had subjected you to that indignity, did you?

A. Yes, sir, I did.

Q. And you charged that up to Mr. Milton personally,
357 did you, as though he was the one who had subjected you to that indignity, did you?

A. Yes, sir, because he was the man that said he would forward the money to me, and it was up to him to do it.

Q. Didn't you know he was speaking for the company?

Did you think he was going to get it out of his own pocket and forward it to you?

A. I thought of only one thing; I was stranded in Lincoln with no money, and that bothered me a good deal.

Q. It was that condition of things, was it, that brought about a somewhat strained relation between you and Mr. Milton, is that right?

A. That was undoubtedly part of it.

Q. What was the other part?

A. Well, I do not know. At times we didn't agree; little strained relations, that is all. Sometimes two people don't always get along.

Q. But that don't always and necessarily involve strained relations, does it?

A. No, sir, not always.

Q. If we don't agree, we sometimes peacefully disagree, isn't that true?

A. Yes, sir.

Q. You knew Mr. Milton had had a good deal to do with the development of this apparatus, as chief engineer of the company, and up to the time that you made that drawing as your superior from whom you received instruction? You knew he had had a good deal to do with the development as far as it had then progressed, good, bad or indifferent, isn't that true?

A. Yes, sir.

Q. Well, don't you think it would have been quite natural to have shown to him what you had devised along that line?

358 A. I do not know whether it was natural or not. I am pretty sure I didn't.

Q. Now, Mr. Kane, did you at any time talk with him about this?

A. About this one (indicating)?

Q. Oh, this invention which you say you made at that time.

A. I talked with him about this drawing after I made it (indicating).

Q. How soon after?

A. I talked with him right after I showed it to Mr. Webster.

Q. What was the substance of that conversation?

A. Why, I took this drawing to him, and, if I recollect

rightly, he was sitting at his desk down on the main floor in the general offices of the Webster factory, and I spread it out before him, and I think I asked his opinion on it. Mr. Milton looked it over and he said, well he said 'I do not think that is going to work.' I said, 'Why not?' 'Why,' he said, 'you have got the igniter finger pointing upward on a direct push of the magneto rod and,' he says, 'that is going to place it out of time so that it won't trip at the right time.'

The Court: The witness is referring to Plaintiff's Exhibit 18.

Mr. Bulkley: I should have said that.

Q. That is what you talked with Mr. Milton about when you showed him that drawing?

A. Yes, sir.

Q. Is that all you talked with him about?

A. As near as I can recollect, that is about all that was said, except I said that I was sure it would work.

Q. Now, that related, did it not, to the means by which the spark was determined in connection with the hit or miss type of engine? What you have described, doesn't it relate to that solely?

359 A. It relates to the time of spark solely.

Q. With reference to what?

A. The position of the crank shaft or the piston.

Q. Isn't it true, Mr. Kane, that what you were talking with Mr. Milton with reference to at that time related to the actuating mechanism between the engine and the magneto?

A. If you call the—yes, sir, that related to the time of the actuating mechanism.

Q. The time with reference to what?

A. With reference to your crank shaft.

Q. Well, what does that mean?

A. It means that Mr. Milton said that this rod, instead of going forward at the right time to get the spark when your piston, was up in the compression stroke. Instead of going forward at that time he thought it should be coming back. That was his opinion on this device.

Q. And that is what you talked about on that occasion, was it, in connection with that drawing?

A. Yes, sir.

Q. And that is all that was said?

A. Yes, sir.

Q. You just simply showed him that drawing?

A. Yes, sir.

Q. And told him that there was something you had?

A. Yes, sir.

Q. And then he made that answer.

A. Well, he, of course, looked it over a little bit; studied it.

Q. Yes; but that is all he said, was it?

A. Yes, sir.

360 Q. And you didn't talk anything about this plug and magneto arrangement, did you?

A. No, sir.

Q. Well, what difference, Mr. Kane, with reference to this trip finger which is shown on your drawing, and which you say Mr. Milton said went up too far,—what is the difference in that respect between that which is shown in your drawing, Exhibit 18, and that which is embodied in the old Milton machine, Exhibit No. 11, which I show you? What is the difference between the two?

A. There is no difference between these two, but there was a difference in the time that the push rods operated. In this mechanism here the push rod comes direct from the eccentric. In this mechanism here the push rod did not come direct from the eccentric. It come from the eccentric to the bottom of a lever, and then there was a pivot, and then this rod come over the top, so that the time of motion was just reversed.

Q. Where is anything of that kind which you have just described shown in this drawing, Exhibit 18,—your eccentric connection that you refer to?

A. Here is the broken magneto push rod that goes to the eccentric (indicating).

Q. It isn't shown there, is it?

A. There is no eccentric shown here, no, sir.

Q. How did Mr. Milton know that it was going to act any differently from that which he had embodied in the old mechanism?

A. I do not know how he knew.

Q. He couldn't know from this drawing, could he?

(No answer.)

Q. You can answer the question or not. If it is embarrassing to you, I will withdraw it.

A. I do not know whether he did or not.

Q. Now, Mr. Kane, what is there on this drawing, Exhibit 18, which could lead Mr. Milton to think, or express
361 himself to the effect, that this was going to operate, as

shown in here, any different from what it operated in the old mechanism? Tell me what there is that would give rise to any such suggestion as that on the part of Mr. Milton?

A. There is this much: One of the troubles that we had and one of the objections—

Q. If you will permit me to interrupt you for the sake of time,—I am asking you what is shown on this drawing that would lead Mr. Milton to suppose that there was any difference in the operation of that device, or the manner of operating that device, then in the old one, the old magneto.

A. In this magneto here, in order to make that operative, one of the great objections to that thing was that in the field in order to put this magneto on we had to take the exhaust cam and the magneto, or the igniter eccentric strap, off the engine and put a new one on, and that was quite a job. Now, one of our objects and one of the things desirable in the new magneto attachment was a means to put the magneto on the engine without taking that exhaust cam and eccentric strap off of the engine, and the models that I had taken up to Milwaukee, the two models Mr. Milton had made, embodied that feature, and it was kind of—it was my understanding that a new attachment ought to be a good field attachment.

Q. Oh, Mr. Kane, if you will just permit me a minute; I didn't ask you anything about that. I ask you now, if you will remember, to look at this drawing.

A. Yes, sir.

Q. And to tell me what there is shown on that drawing which would lead Mr. Milton or anybody else to suppose for a minute that it would operate any differently, in respect 362 to the thrust rod actuating mechanism, than it did in the old magneto arrangement of Mr. Milton. Now, tell us what there is on that drawing.

A. On this drawing there isn't anything.

Q. Yes. You say, Mr. Kane, that you keenly appreciated the situation in which the Webster Company found itself with respect to the old Milton magneto.

A. Yes, sir.

Q. And you had a talk with your father about the situation, didn't you?

A. Yes, sir.

Q. And he told you that you ought to put your mind to work to try to get up something which would relieve that difficulty, didn't he?

A. He told me that if somebody didn't do it the Webster Company would not have any more of the Harvester Company's business.

Q. Didn't he tell you you ought to do it,—that you ought to try to get up something to do it, yourself? Didn't he tell you that?

A. No, sir, I do not think so.

Q. You do not think so. Now, how long before Mr. Webster enlisted your services in getting this up did you have that talk with your father?

A. It was not before this time.

Q. It was after that, was it?

A. Yes, sir.

Q. And it was after you had got it up, was it, or before?

A. Before I got this up.

Q. Yes. Was it between the time when Mr. Webster asked you to help him out and the time that you got it up that your father talked with you—was it?

A. Yes, sir.

Q. Did you tell him what Mr. Webster had told you
363 to do or asked you to do for him?

A. I think I mentioned the fact.

Q. Then you went home and in the afternoon of the next day at your house—am I right about that?

A. Yes, sir.

Q. —you got up this drawing—Exhibit No. 17, is it? Is it 17?

A. Exhibit No. 7, I think.

Mr. Bulkley: It should be 17, shouldn't it?

Mr. Williams: Let us not get that confused. You see this drawing was involved as an exhibit in the interference, and it has the exhibit marking which was there used. In this case it is Plaintiff's Exhibit 17.

Mr. Bulkley: All right. Exhibit No. 17. Now, read the question to the witness.

(Question read as follows: 'Q You got up this drawing, Exhibit No. 17'—)

Q. —did you not, in the afternoon of the next day after you had this talk with your father and after Mr. Webster had asked you to help him out, is that right?

A. No, sir, I do not think you are right.

Q. Well, then, what is the fact?

A. Mr. Webster asked me. That, if I can recollect rightly,

was a Saturday. And on Sunday, the next day, my father asked me, and that afternoon I sat down and did this piece of work.

Q. Yes. That is Sunday afternoon. Now, you said on your direct examination, I think, that your father told you to put your name on it, together with the date, didn't he?

A. Yes, sir.

Q. Did you say anything to him about his putting his name on there?

A. No, sir.

364 Q. Did he say anything to you about his putting his name on there?

A. No, sir.

Q. Did you describe this thing to him at that time when you made it that Sunday afternoon at your house?

A. Yes, sir.

Q. What was your father's position in the International Harvester Company at that time?

A. He was the general manager of the experimental department.

Q. You were living there at home with your father, were you?

A. Yes, sir.

Q. At that time?

A. Yes.

Q. Now, what was it that you explained to your father in connection with this? You needn't describe the whole thing, but just tell me what features of the thing you explained to him, generally? What did you tell him?

A. I just generally told him that I mounted the magneto directly upon the igniter plug of the engine.

Q. Is that all you told him?

A. Why, I probably told him it was a big improvement over what they were doing, or something like that.

Q. Is that the only feature that you described to him?

A. Yes, sir.

Q. Now, Mr. Kane, when was it you got up this device for controlling the initiation of the spark in respect to the speed of the engine so as to cut off the spark when there was no charge in the engine?

A. That was got up shortly after I made the other drawing.

365 Q. Shortly after you got up the drawing, Exhibit 17?

A. No, sir, the one you have in your hand.

Q. Shortly after the one, Exhibit 18?

A. Yes, sir.

Q. How long after?

A. Well, it was within a week or two.

Q. And did you make a drawing of that?

A. Yes, sir.

Q. And did you show that drawing to your father?

A. No, sir, my father never saw that drawing.

Q. You never described to him that invention at all, is that right?

A. No, sir. I probably described that to him.

Q. Do you have any idea when it was that you did, or are you merely conjecturing with regard to that, as to whether you ever described it to him or not?

A. Well, I can't recollect any definite conversation in which I described that to him.

Q. Nor any definite time when you might have had such a conversation with him?

A. Well, he was very much interested in it, and we talked about these matters as the design of the machine went along.

Q. But you haven't got any definite notion now—

A. No, sir.

Q. —as to whether you ever explained this other feature of invention to him or not, is that right—your father, is that right? You didn't have any definite recollection in your mind when it was, if ever, you did explain this invention, this feature of the invention to him, am I right about that?

A. I know I did some time.

Q. But you do not know when it was?

366 A. I couldn't place that time exactly.

Q. Now, coming down to the conversation which you had with your father about getting a patent, when did you have that conversation?

A. Well, it was probably three months after the time I first made the invention.

Q. Was it after you had talked with Mr. Webster,—

A. Yes, sir.

Q. —about patenting it?

A. It was after that talk.

Q. Did you tell your father what Mr. Webster had said to you about it?

A. Yes, sir, I did.

Q. What did he say.

A. He said, 'Well, you take it down to Brown, Nissen & Hopkins, and have Mr. Sprinkle file an application on it.'

Q. Had you known Mr. Sprinkle before you took it down there?

A. Yes, sir, I was acquainted with Mr. Sprinkle.

Q. How long had you been acquainted with him?

A. Well, it was some years anyway.

Q. And did you tell Mr. Sprinkle what your invention was,—describe it to him?

A. Yes, sir, I described it to him.

Q. In his office, in Mr. Sprinkle's office?

A. Yes, sir.

Q. What did you tell him the invention was that you made?

A. Well, I told him I had done some work on magnetos. 'I do not know whether there was very much in it.' My father said we had better file an application on it, so we went ahead and did it.

367 Q. I understood you to say that your father told you in connection with what Mr. Webster had said that, whether it was patentable or not, it would be a good thing to get some patent experience, and to go down to Mr. Sprinkle and get out a patent, is that right?

A. Yes, sir, that is right.

Q. Now, you haven't yet told me what it was that you described to Mr. Sprinkle as your invention when you went there to take this patent out?

A. If I remember right, we took one of these old pamphlets illustrating the old way of fastening it onto the engine, and I also took an illustration, a blue-print, I think, showing the new attachment, and I said, 'Here is the way we used to do it, and here is the way I have done it. You get a patent on it.'

Q. And he said he would, is that right, or he would try to?

A. He said he would try to.

Q. Did he tell you how much he would charge you, or did you have any talk about charges at that time?

A. We had no talk about the charges.

Q. Did you tell him anything about an improvement in the means whereby there should be no initiation of the spark when there was no charge in the engine? Did you tell him anything about that?

A. Yes, sir, I did.

Q. Oh, you did? What did you say to him about that?

A. Well, I explained that to him as one of the differences between the old operation of the magneto and the new.

Q. Now, what did you tell him at that time was the principal and most important thing which you wanted patented, Mr. Kane? I am talking about your conversation with Mr. Sprinkle, now. What did you tell him was the most important feature you wanted covered by the patent?

368 A. I told him I thought the big thing about the whole apparatus was how nicely that spark would cut-out.

Q. 'Cut-out,' what do you mean by that?

A. The magneto become inoperative.

Q. You told him that was the nicest thing, did you?

A. Yes, sir. I also expressed my opinion I thought that was a big invention.

Q. You did?

A. Yes, sir.

Q. And that is what you didn't show to your father, or don't remember when you ever showed that feature of invention to your father,—is that the one?

A. Yes, sir.

Q. That isn't the one you talked to your father about, is it?

A. When do you mean?

Q. The one for regulating the cut-out of the spark.

A. No, sir.

Q. What was the most important thing that you and your father discussed, and Mr. Webster discussed, Mr. Kane?

A. I and my father discussed largely the means of fastening the magneto onto the engine.

Q. Yes. And that was the thing in connection with which Mr. Webster had asked you to help him out, wasn't it?

A. No, sir.

Q. What? Didn't Mr. Webster ask you to help him out in connection with the means of fastening the magneto and the plug to the engine?

A. No, sir, he did not.

Q. He didn't discuss that at all with you prior to the time that you filed your application?

A. He did prior to the time we filed the application.

369 Q. Well, when was it he discussed that with you?

A. Discussed that with me when I showed him the drawing.

Q. Mr. Kane, is there anything on that drawing,—the

first one that you had,—showing any means of regulating or determining what you call the cut-out of the spark?

A. No, sir, there is not.

Q. No. And did you show that to Mr. Webster?

A. Yes, sir, I did.

Q. The next day after you had made it?

A. Yes, sir.

Q. And in response and in compliance with his request to help him out in connection with this, which you showed him as being the thing to help him out, isn't that true?

A. Yes, sir, we discussed that.

Q. And you didn't discuss anything else before you made this drawing, did you—when you made the drawing, with Mr. Webster?

A. Not before I—

Q. Now, to go back, you say Mr. Webster had a talk with you about the difficulties arising in connection with the old Milton magneto, is that right? We will go slow, now, Mr. Kane, so as to have ample time to answer and not to confuse.

A. All right. I thank you. As I stated before, Mr. Webster come up to me and said the situation was serious; that they had to have some better means of attaching the magneto, or something had to be done, and wanted to know if I could offer any suggestions or help him.

Q. In reference to what did he want you to do something?

370 A. In reference to any new attachment.

Q. Well what new attachment?

A. Any new attachment that I could make to help him, or anything.

Q. Well, what did he tell you was the trouble he wanted you to remedy, if it was possible for you so to do?

A. As near as I can recollect, he didn't make any attempt to specify what the troubles were.

Q. Did he tell you anything about any particular part of the apparatus—

A. No, sir.

Q. —that he wanted you to direct your attention to in order to cure the evil?

A. No, sir, he did not.

Q. Didn't you know what he was talking about when he

spoke of the troubles and difficulties that had arisen in connection with the apparatus of the old Milton type sold to the International Harvester Company?

A. Yes, sir, I had a good idea.

Q. You had a good idea. And what was that idea?

A. Well, the magneto was insecurely mounted on the engine.

Q. Exactly. Did it have anything to do with this cut-out, spark cut-out? Did you have any idea that that was what he was talking about in connection with which he wanted you to remedy difficulties?

A. That was one of the difficulties we were having.

Q. Did you have any idea that that was what he was referring to when he enlisted your help and asked you to help him out?

A. I had an idea any suggestions we could give to Mr. Webster to help out the situation at that time he would be very glad to get.

371 Mr. Bulkley: Q. Now, I understand you to have said, Mr. Kane, that the report which was made by Mr. Waterman under date of March 15, 1909, which is marked in evidence Exhibit 1, was what led Mr. Webster to come to you for your assistance; didn't you say that, Mr. Kane, on your direct examination? And I show you the letter. (Handing letter to the witness.)

A. I have no doubt this had something to do with Mr. Webster's coming to me.

Q. Do you find anything in this or any allusion to this feature of what you call the automatic spark cut-out?

A. No, sir.

Q. Now, as I understand it, Mr. Kane you told Mr. Sprinkle that the most important feature of your invention, and that which you wanted him by all means to patent, was the means for automatically cutting out the spark,—that feature; is that right?

A. That was one of the things, yes sir.

Q. Well, now did you tell him that that was the most important thing?

A. I do not know whether I told him, or whether he seized upon that himself. I could not answer that.

Q. I thought that a moment ago you told me that that is just what you told him. Didn't you?

A. I told him I thought that that was the nicest and most ingenious thing in it.

Q. Now, what did you tell him about the means by which the magneto and plug were to be attached to the cylinder?

A. Well, outside of telling him that by doing that we had a means of securely fastening the magneto to the cylinder, and also a means of cutting out a lot of intermediate and useless mechanism, I do not know as I told him very much.

372 Q. You did not consider it of very much importance; is that right?

A. It seemed to me a matter more of design than importance—invention.

Q. Is that what you told him?

A. Yes, sir.

Q. And you told him that you thought that it was not an invention, and was a mere matter of design? You told that to Mr. Sprinkle, did you, when you went to him to get a patent?

A. I told him it was a good means and preferred means of fastening the magneto on the engine.

Q. Well, I asked you if you told him that you thought it was a mere matter of design, and not an invention.

A. I possibly did, yes.

Q. You possibly did? Don't you know whether you did or not?

A. No, sir, I could not say for sure.

Q. Did you read over the specifications?

A. Yes, sir.

Q. And claims, which he prepared, and look carefully at the drawings?

A. Yes, sir, I did.

Q. Did you understand what he was talking about in the specifications, and did you understand the drawings which he made for you?

A. I understood the drawings, and I understood the specifications fairly well. The claims were a little bit hazy in my mind.

* * * * *

Q. Was there anything hazy about the description of the invention that he made, and which you read over, that you did not understand?

373 A. No, sir, I do not think there was anything in the description or the specifications I did not understand.

Q. Did you try to see whether he had said anything about this idea of the combined magneto and plug in the specifications?

A. Yes, sir.

Q. Before you signed it?

A. Yes, sir, I did.

Q. And you found, did you, that it was there described?

A. Yes, sir. It is there described.

Q. Was there anything in that specification, before you signed it, and after you had looked it over carefully, which pointed out any of the features of advantage or improvement in connection with that design?

Mr. Williams: I would like to object to that question, because it is not competent. The specification itself shows what it contains, or whether anything was said. I make that objection now simply because I think this cross-examination tends decidedly to become incompetent absolutely, in so far as this witness can testify. I do not think that question is competent, and I do not want to let counsel get the idea that we will not object if he goes farther and farther afield, as he seems to be doing.

The Court: I think it is all right. You may proceed along that line.

Mr. Bulkley: Now, read the question, please.

(Pending question read.)

The Court: Is that question complete? Read that again.

(Question again read.)

Mr. Bulkley: Q. (Continuing) With the design of the combined magneto and plug?

A. Well, the only thing I can recollect at this time it says about the combined plug and magneto bracket is that it states in there that that is the best and preferred way 374 of mounting the magneto on the engine. I think there is something like that in the specifications. There are eight or ten sheets there, if I remember rightly, and there is a lot of stuff in there, and I cannot tell you what all there is in it.

Q. You knew that you had to swear to it, didn't you, Mr. Kane?

A. Yes, sir.

Q. And you tried to get a reasonable knowledge as to what you were going to swear to, didn't you, at that time?

A. Yes, sir.

Q. You did not propose to swear to something that was so hazy that you did not know anything about it, did you?

A. Nor sir.

Q. And you do not believe that you did, do you?

A. No, sir.

Q. Now, you say the claims were hazy and you could not know what they meant exactly, and we are all to some extent in the same boat; but didn't you know what they were claiming at, what feature of invention they were claiming at?

A. In general, yes, sir.

Q. Yes, and what feature of invention were they claiming at when you inspected that document, and signed, executed and swore to it?

Mr. Williams: I object to that question as incompetent. The claims show for themselves. This is not an expert. He is not qualified. I do not know why he should say what they were claiming at.

Mr. Bulkley: He says he knows what they were claiming at or he would not have sworn to it.

The Court: Read it.

(Pending question read.)

The Court: Sustained.

375 Mr. Bulkley: Q. What conversation did you have with Mr. Sprinkle about four years later, in connection with the Milton patent?

A. I told Mr. Sprinkle that Mr. Milton had got a patent on the thing that I tried to have him get me a patent on.

Q. Was that the means for automatically cutting out the spark, that Milton was trying to get a patent on?

A. No, sir, it was not.

Q. What conversation did you have with Mr. Sprinkle at that time with reference to the Milton patent and your own application? Now state all of the conversation that you had with him some four years after you made your application through Mr. Sprinkle. State all of that conversation.

A. Why, I called Mr. Sprinkle's attention to the fact that Mr. Milton had had a patent issued, and I told him I thought that the subject-matter was the same as was in our patent; and he said, 'Well, we will have to get that patent, and investigate and see.' So in the due course of time we got a copy of the Milton patent, and Mr. Sprinkle went through

our application and went through the Milton application, and he says, 'Yes, you ought to have those claims in your patent'; he says, 'Your drawings and specification disclose the same idea as Milton has there.'

Q. When did you discover that Mr. Milton had gotten a patent?

A. I was looking through a copy of the Patent Gazette, and as I went through it I happened to come across Mr. Milton's patent.

Q. And how long was that after the Milton patent had issued, that you saw it in the Gazette?

A. That was a month or six weeks, I believe.

Q. Was it as long as that, Mr. Kane?

A. Yes, sir.

356 The Court: What was the date of the Milton patent?
Mr. See: May, 1914.

Mr. Williams: May, 1914, Mr. See says.

Mr. Bulkley: Q. Now, when you had this talk with Mr. Sprinkle some months after the Milton patent had issued, as I understand it,—Was that right?

A. Yes, sir.

Q. You were talking to him, and he was talking to you about that which originally, when the specification was drafted, was what you told him was a mere matter of design, and not invention, was it not?

Mr. Williams: Pardon me. Will you read the question, please?

A. No, sir.

(Pending question read)

Mr. Williams: Just a moment. What was the question?

A. No, sir.

Mr. Bulkley: Q. The same thing, was it not, that you had previously been talking with him about, when the specification was prepared, as not constituting any invention?

A. Nor, sir.

Q. Not the same thing?

A. No, sir. It was the same thing.

Q. What was it about?

A. I told Mr. Sprinkle that combining this plug and the casting on it I did not think there was any invention in that. In Mr. Milton's patent, if I remember rightly, it deals with a trip finger in there, and a cam surface, and that sort of stuff.

Q. Did you carefully consider this Milton patent, after you had seen it in the Gazette?

A. Yes, sir.

Q. And did you discuss it with Mr. Sprinkle?

377 A. Yes, sir.

Q. When were the claims made which were directed to take over into your application that which was claimed in the Milton patent, if you know?

A. Why, I cannot place that date definitely. I know that it was,—it must have been, four or five months after I saw the patent in the Gazette.

Q. Now, Mr. Kane, going back to the earlier period of this so-called development by you, was Mr. Milton in and about the factory premises of the Webster Company on or about the time that you say this thing was developed by you at the instance and request of Mr. Webster?

(No answer.)

Q. Do you understand that question?

A. I do not.

Q. Was Mr. Milton in and about the factory premises when you were getting this thing up for Mr. Webster?

A. Yes, sir, he was.

Q. All the time there, was he not?

A. No, I would not say he was there all the time.

Q. Oh, not every minute, but you saw him each day in and about there, didn't you?

A. No, sir, not each day.

Q. Had he been away for any protracted period, or was he frequently absent from the factory of the Webster Company in and about that time?

A. Yes, sir, sometimes he was away.

Q. Well, was it very frequent that he was away, and was he away for long periods of time?

A. He was not, as a rule, for long periods of time.

Q. No?

378 A. No, sir.

Q. And not very frequently, was he?

A. Well, it depends on what you mean by 'frequently.' Once in a while,—

Q. Well, what do you mean? What do you think? What do you understand by the word 'frequently,' yourself?

A. A couple of times a month.

Q. All right. He might have been away a couple times a month?

A. Yes, sir.

Q. Is that right?

A. Something like that.

Q. Now, during the period when, as you say, this thing was given over to development, when you had gotten it up, and while it was progressing along, he was in and about there, the premises and factory of the Webster Company, was he not, with the exception of infrequent absences, and not absences for any long period?

A. Yes, sir, he was—

Q. Is that about right?

A. He was about the premises.

Q. Yes. Now, who sent you to Milwaukee to see,—to submit this magneto to Mr. Waterman? Did you go on your own initiative, or did Mr. Webster tell you to go?

A. I think it was Mr. Webster told me to go.

Q. Do you know anything about a design which was made by Chiville in an effort to improve the troubles that existed in the old Milton arrangement, at or about that time?

A. No, sir, I do not.

Q. You never heard anything about his having made an effort along that line, as well as yourself?

379 A. Well, I think Mr. Chiville did some work for Mr. Milton. On those two previous attachments that were taken to Milwaukee.

Q. But that is all you know about it?

A. Yes, sir.

Q. You do not know anything about Mr. Webster having asked Mr. Chiville as well as yourself to get up something that would relieve these difficulties? You do not know anything about that, do you?

A. No, sir, I do not.

Q. You did not see any design which Mr. Chiville had gotten up in connection with the same subject-matter with which you were working; is that right? You did not see any design which he had gotten up at or about that time?

A. No, sir.

Q. You did not make any comparison with him of a design by him and your own design?

A. No, sir. I made no comparison.

Q. Oh? Mr. Kane,— And then I will get you go,— Do you

know whether Mr. Munn ever talked with Mr. Milton about this so-called improvement of yours?

A. No, sir.

Q. And when I say 'so-called' I do not want to sneer at you.

A. That is all right, sir.

Mr. Williams: Mean what?

(Question read.)

A. No, sir; I do not know whether Mr. Munn talked to Mr. Milton or not.

Mr. Bulkley: Q. You three did not discuss it together at any time?

A. No, sir.

380 Q. And this work of development went on, this device was embodied in this drawing, Exhibit 18— And may I interpolate to ask you if other drawings or working drawings were made of it at any time by the Webster Company?

A. Yes, sir.

Q. They were?

A. Detailed drawings were made.

Q. And those working drawings were made by Mr. Munn, and you and he discussed it together, did you not?

A. The working drawings were not made by Mr. Munn.

Q. Who were they made by?

A. I made the working drawings.

Q. Yes. Did you discuss—

Mr. Williams: Made by whom?

A. I made the working drawings.

Mr. Bulkley: Q. Did you discuss those working drawings with Mr. Munn, and talk with him about it?

(No answer.)

Q. Do you understand my question, or is it vague?

A. Yes, sir, your question is all right.

Q. Yes?

A. I am trying to think—

Q. All right.

A. —if there was any discussions. No, sir, there was very little discussion with Mr. Munn on the working drawings. They were made practically just as the big drawing there shows.

Q. Now, during these months after you had made this first drawing, up to the time when you had finally developed

that which was to be delivered to the Harvester Company, you had no talk with Mr. Milton about it, did you?

381 A. No, sir.

Q. And you do not know whether Mr. Munn had any talk with Mr. Milton or not?

A. No, sir, I do not.

Q. And so you undertook, yourself, to develop, perfect and give to the Webster Company that which was to constitute its product, to be sold to the International Harvester Company, without any consultation with its chief engineer; is that right?

A. Yes, sir.

Mr. Bulkley: That is all.

Mr. Peaks: Mr. Bulkley, just one second.

Mr. Bulkley: Q. Did you ever have any talk with Mr. T. K. Webster after he had turned down this device or this arrangement which you had submitted to him, as not being patentable, in which he showed that he had changed his mind as to whether it was patentable or not?

A. No, sir, I never had any conversation with him.

Q. Did you ever have any talk with Mr. T. K. Webster when you sold him your application, when you sold the Webster Company—Permit me to correct my question.

A. No.

Q. —when you sold the Webster Company your application?

A. No, sir, I did not have a talk with Mr. T. K. Webster.

Q. And you did not see him at all?

A. No, sir.

Q. With whom did you conduct those negotiations?

A. Mr. Brown and Mr. Williams.

Q. What Mr. Brown?

A. Mr. Walter Brown, manager of the Webster Electric Company, of Racine.

Mr. Bulkley: That is all, unless you think of something more, Mr. Peaks.

382 *Redirect Examination by Mr. Williams.*

Q. Mr. Kane, there has been reference made to the so-called chief engineer of the Webster Company, and to the departments, I believe; can you tell us how many people connected with that organization had to do in any way with

the manufacture or design of magneto equipment? Was it a big organization, or a small organization, in so far as the magneto business was concerned?

A. It was a small organization.

Q. How many people, altogether, were devoting themselves to the magneto business there?

A. Do you mean workmen, and everybody?

Q. Everybody.

A. When I first went to the Webster Company there were probably—oh, twelve or fifteen men.

Q. So that among those twelve or fifteen men there were the salesmen and the demonstrators and the mechanics and the draftsmen and the chief engineer,—give them all the titles you please; no matter how you may designate them, there were only twelve or fifteen?

A. Yes, sir.

Q. Now, you speak about the fifth floor of the factory building, I take it; was the Webster Manufacturing Company at that time engaged in lines other than the manufacture and sale of magneto equipment?

A. The Webster Manufacturing Company was largely engaged in making transmission machinery and grain elevator machinery, and that sort of apparatus, and the magneto department was just a small department up on one end, or, rather one corner it was when I first went there, of the fifth floor.

Q. Now, did you allude to the fact that this Webster Manufacturing Company made also some gas engines?

383 A. Yes, sir.

Q. What part of the company's business was that of manufacturing or selling gas or gasolene engines? Was that a large part of the business or a small part?

A. That was another small part of the business, and occupied a part of the floor that the magneto department was on.

Q. You were asked some questions by Mr. Bulkley, as the result of which you undertook to describe the construction and mode of operation of the old Milton form of magneto, which had been sold to the Harvester Company before your invention was supplied in its stead. May I call your attention to this cut in this pamphlet, Plaintiff's Exhibit No. 13, and ask you if you will on that cut point out very particularly how the motion was transmitted, from what you re-

ferred to as a cam shaft, or eccentric of the engine, to the ignition equipment?

A. Do you want me to put a mark or letters on here?

Q. If you find it convenient. Perhaps I will ask you afterward; after you have explained, without putting any letters on, then I may ask you later to apply letters to some of the parts that you refer to.

A. The cam shaft was located down just forward of the crank shaft of the engine, and the eccentric was located on the end of the cam shaft; and then from the eccentric a connection or rod ran across to the bottom of this lever here which was pivoted on a little casting (indicating), bolted on to the back of the cylinder of the engine, and then from the top of this lever the magneto push rod went over that and tripped the finger.

Q. That is, a push rod went over to engage the push finger of the rotor of the magneto?

A. The push finger or trip finger, as we called it.

Q. Now, as I understood you, there was some difficulty about attaching these devices, such as shown in the 384 pamphlet, to engines in the field? As distinguished from what?

A. As distinguished from engines in the factory.

Q. Let me ask you, before we go to that matter further, if you will draw a lead line and apply the letter 'R,' say, to the pivoted lever intervening between the rod from the eccentric of the engine and the rod running to the push finger of the magneto.

(Witness marks pamphlet as requested)

Q. What was the occasion for installing one of these magnetos in the field? How did that come about?

A. A man would buy an engine from the Harvester Company and he would have the battery equipment on it, and he would have trouble with it and would want to put the magneto equipment on it. If he wanted to put the magneto equipment on it he had to buy the magneto, and the appliances that go with it, attaching it to the engine, from the Harvester Company, and they would have to take that out into the field, or wherever the engine was located, and put this attachment on.

Q. Did you ever have occasion yourself to do that, or to see that done?

A. Yes, sir.

Q What was the difficulty in applying this attachment on this Milting form of mechanism which was overcome by the invention which you submitted, and which was later adopted?

A The difficulty of attaching the old style of Milton magneto was that in order to make the magneto trip in proper relation to the crank shaft, it was necessary to take the exhaust cam and magneto eccentric off the engine and put the new exhaust cam and magneto eccentric back on, which had the keyway in a different place, and that was rather a difficult job for a man to do in the field. Likewise the boss that this magneto was bolted on was not finished on most 385 of the engines in the field. In order to get the magneto to slide over that boss, the man had to take a cold chisel and file, and file it until it was somewhere near round, and that was a big job.

Q. Now, this letter of March 15, 1909, from Mr. Waterman, contains this sentence: 'After careful consideration of the principal features of the Milton magneto existing today, both as erected by us here at Milwaukee and as now suggested by the Webster people for erection, to permit direct operation without altering the present design of the engine, we have reached the following conclusions,' etc. Now, can you explain what you understood when this letter first came to your attention, was referred to by this phrase relating to a suggested construction adapted to permit direct operation and so on; what did you understand that language in that letter to refer to?

A. Well, in the several models that I had previously taken up to Milwaukee at the direction of Mr. Milton, the magneto was attached to the boss, but it did not require shifting the exhaust cam and eccentric, in order to put it on.

Q. Now, did those modifications, as proposed and made by Milton and which you had taken up to Milwaukee on these two trips, did they include this lever or rocker?

Mr. Bulkley: Can't you ask what they included?

Mr. Williams: I am asking whether they did include that. He explained fully to you just what the construction was, as nearly as he could make it clear in words. I am trying to show, if possible, a picture here and showing just what he is talking about.

Mr. Bulkley: It seems to me he ought to ask what was

included and not point out something to him and tell him what it included.

The Court: Go on, Mr. Williams.

Mr. Williams: Will you read the question as far as I have it.

(Question read as follows: 'Now, did those modifications, as proposed and made by Milton and which you had taken up to Milwaukee on those two trips, did they include this lever or rocker?—')

Mr. Williams: Q. (continuing.)—which you have marked with a capital 'R' on the cut on Plaintiff's Exhibit 13?

A. No, sir, those two models did not include that lever.

Q. Was the effect of that lever arm, as marked on Exhibit 13, to reverse the direction of the reciprocations of the motion transmitted from the cam shaft to the magneto?

Mr. Bulkley: I object to the leading question. Why doesn't he ask him what he did?

The Court: He may answer.

A. Yes, it reverses the motion.

Mr. Williams: Q. Now, when it came to the matter of applying the equipment invented by you to the Harvester Company engine, will you explain by reference to this pamphlet, Plaintiff's Exhibit 16, how the motion was transmitted for engaging and tripping the push finger on the magneto, and particularly in so far as the reversal of motion by the introduction or the omission of the rocker lever 'R' is concerned?

A. On the old type of attachment the magneto trip finger projected upwards, practically vertically, and the magneto trip rod worked over the top of the roller to engage this finger. A lever being put in there it was necessary in order to make it function properly to take the exhaust cam and the magneto eccentric off the engine and put on a new one, that had a keyway at a different point. On the improved type which I took up to Milwaukee—

Q. Now, are you talking about your improvement, or the suggestion that was made by Milton?

A. I am talking about my improvement. In My improvement to the lever 'R,' referred to in the other exhibit 387 here—I think you call it No. 13—that was eliminated, and we pushed direct and that made my magneto operate at the proper time.

Q. Now, do I understand that the machines which Milton

had suggested, and which you had taken to Milwaukee, that they in a similar manner to that which was followed in the application of your design, eliminated this rocker lever capital 'R'?

A. The magnetos that I took to Milwaukee of the Milton design eliminated the rocker arm 'R' in the Exhibit No. 13.

Q. Now, when in these machines, as suggested by Milton and which you took to Milwaukee, this reversing lever 'R' was eliminated, was there something else substituted for it by Milton, or in accordance with his scheme?

A. Well, on the Milton scheme that I took to Milwaukee, the trip finger was vertical. Instead of pointing up it pointed down, and the rod from the eccentric on the engine came up forward and passed the trip finger and was hung on a link suspended on the frame of the magneto, and there was a small trip on this rod.

Q. Now, when this Waterman letter of March 15, 1909, first came to your attention, did you understand that it referred both to the old Milton form of equipment as embodied in this Plaintiff's Exhibit No. 11, and as had been proposed by Milton, and in conformity with which suggestion you had taken machines on two trips to Milwaukee—the question is whether you understood that this report of Waterman's covered both the machine, as it was being used, and as Milton proposed to change it?

A. My understanding was that it covered everything that we had ever taken up to Milwaukee, both the regular type and the machines that we took up for improvements.

Q. Now, you say you yourself had had some experience in the matter of attaching or attempting to attach these devices in the field. Won't you explain rather fully just how much and what sort of experience you had on this trip to Lincoln, Nebraska, and other trips which you were taking out into the country, in so far as the mechanics of the trip were concerned; what you had to do with the things mechanically; what you did with them.

A. I don't quite understand what you want me to tell you.

Q. Well, Mr. Bulkley asked you a number of questions about your three months' experience in the factory, followed by some months of experience in going to agencies, and one thing and another, and I want you to tell just what sort of an experience you had with the equipment itself that the Webster Company was trying to sell, and keep sold before

April 11, 1909, and during the interval after you got out of the factory under Mr. Munn and up to April 11, 1909.

A. Well, the experience was something like this: I would go into one of the general agencies, and I would tell them that I was a representative of the Webster Manufacturing Company that made the Milton magneto, and they would tell me that I was just the fellow they wanted to see, and then he would proceed to tell me just what he thought of the type of magneto that was being attached to the engines, and some of his opinions in general as to anybody who would make a thing like that and send it out; and it was not a very pleasant experience for me. I used to go to most of the places with rather a wish that I didn't have to face those fellows. It got so up at the Milwaukee Works that it was practically the same way on the several trips I made up there.

Q. That has to do with what they talked about. But did you in connection with those trips or visits ever see any of the equipment on the engines or ever handle or do anything with it or operate it, or repair it at times, or do anything with it, with the equipment itself?

389 A. Well, I used to see quite a few of them lying in the corner of the scrap heap at the various agencies and some times I could persuade them to let me take one of the magnetos and take one of the engines they had there on the demonstrating floor, and put it on, and try to prove to them that it was all right, and I could take one of those old magnetos and put it on and I could make them operate, and I tried to convince them that the fault was theirs and not the fault of the attachment of the magnetos.

Q. Did you have that experience more than once during this interval of time? Did you do that more than once?

A. Yes, I did that several times.

Q. Now, when you speak of agencies, whose agencies are you speaking of?

A. I mean the general agents of the International Harvester Company.

Q. Their general sales agents?

A. Their general sales agents located at various places in the country.

Q. During this interval of time did you ever have occasion to undertake to correct or eliminate troubles that farmers or others were having in attempting to operate engines equipped with these Milton apparatus?

A. Well, I used to have a particularly hard experience try-

ing to attach a magneto, or trying to make an old one work, and when I would get back to the hotel at times, I would try to figure a little bit on how we can eliminate all this trouble and expense.

Q I am not asking you what you thought or tried to do, but whether you ever went out to a farm or place where an engine was, and where the engine should be in operation, and do anything to put it into operation, or correct its operation; did you ever have that kind of experience?

A Yes, I had that kind of experience.

Q Did you try to do that sort of thing more than once?

390 A. Yes, sir.

Q. How often?

A. Oh, I used to run into something of that kind every little while. If I would go to the agent and there happened to be one of those magneto attachments out in the territory that was giving trouble, I was just the man they were looking for and they would shoot me out to it.

Q. They did what?

A. Sent me out to it.

Q. Then what?

A. I would try to fix it and convince the farmer that it was a fine thing.

Q. Did you try to fix it by talking or doing something mechanically?

A. I used to do both. It was just as important to fix it by talking to them as to fix the magneto itself.

Examination of the witness, Kane suspended to permit witness Waterman to be recalled.

H. A. WATERMAN, having resumed the witness stand, further testified as follows:

Recross Examination by Mr. Bulkley.

“Q. I asked you one question as to whether in the Wattles construction the magneto was mounted on the plug, and you said it was not. What did you understand that question to mean?

A. I understood you to mean that it was attached or part of the regular plug of the engine. I was rather hazy just then, I think, and I have not seen the magneto since, but I recollect quite clearly that the plug and magneto were one, and

that the old plug was removed and the plug part of the magneto was inserted in its place.

391 Q. Where were the tests conducted on this Wattles magneto?

A. We had a small building, a sort of laboratory, and at first Mr. Wattles was assigned an out of the way corner of this building in which to perform his own experiments.

Q. Where were the tests made on this Milton improved form of magneto?

A. They were made on the regular testing floor with the regular product.

Q. In the same building?

A. I think not. I think the former was in the laboratory and the other on the testing floor.

Redirect Examination by Mr. Williams.

Q. This work that Wattles was doing, I understand, was of an experimental nature. Was he making changes as he went along trying one thing and another?

A. Mr. Wattles brought the magneto to the factory and requested a test to be made of it as to durability and efficiency.

Q. And that was found to be unsatisfactory in the test?

A. I told him he might have the use of the floor, and any help he needed so long as he paid the expense, and he went along with that work.

Q. Did he do something more than to put it on and run it on the engine; did he make changes?

A. Yes, he made changes and was still working on it when I left the company.

Q. When you left the company?

A. Yes, sir.

Q. That work of his continued there for a considerable period of time, I take it?

A. Several months the first time; and then at intervals for weeks at a time.

Q. So far as you know the experiments never developed to a point where the company was willing to accept and use the apparatus that he was working at?

A. You mean his company or the Harvester Company?

Q. The Harvester Company?

A. The Harvester Company never adopted the apparatus, no, sir.

Mr. Williams: I think that is all.

Recross Examination by Mr. Bulkley.

Q. To what did these changes that you speak of in this Wattles apparatus relate?

A. As I stated to you this morning, the doubtful question seemed to be the operation of the plunger, which was controlled entirely in its action by the compression in the engine cylinder, and I think he later made alterations in the mechanism which controlled the movable electrode, and most of his work was an effort to get proper lubrication and freedom from wear on the part of this small plunger.

Q. Will you tell us a little more in detail what the changes in the electrodes were to which you have just referred, and which were later made, as I understood you to say?

A. When he first brought the magneto to the factory he depended upon the regular tripping mechanism of the engine to release the movable electrode in his magneto, and later, after a long running of the outfit, either he or some one around him discovered that it worked just as well without the tripping mechanism and he made some slight change to cover that action by the impulse of the small piston—accomplish that action by the impulse of the small piston.

Q. At any time was a change made in the means employed for mounting the magneto on the plug?

393 A. So far as I know, no, sir.

Mr. Bulkley: That is all.

Mr. Williams: That is all, I think.

EDMUND J. KANE resumed the stand on behalf of plaintiff and further testified as follows:

Re-Examination by Mr. Bulkley.

Witness testified that when he first went to work for the Webster Company he was paid a salary of \$75 per month and that after three or four months it was raised to \$100 per month.

MAURICE KANE, called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Resident of Chicago, age 69, connected with the International Harvester Company. Connected with that concern since its establishment, a little over sixteen years. Father of the witness E. J. Kane. Acquainted with Mr. T. K. Webster. Knew that the Webster Manufacturing Company was selling a so-called Milton magneto to the International Harvester Company in 1908. Knew that witness' son Joe went to work for the Webster Manufacturing Company some time in 1908 or 1909. Knew very little about the magneto equipment which the Webster Company was selling to the International Harvester Company at that time. His son talked to him about the troubles that the International Harvester Company was having with the magneto equipment which the Webster Company was supplying to it, and about his going in the country to look after them, but did not explain the troubles particularly—told him that they were having trouble with them and that he fixed them up all right so they worked. Witness had no knowledge or information as to those troubles, aside from what his son told him, except what he heard through 394 the Sales Department of the company, to the effect that they were having trouble but there was no explanation—they did not know what the real trouble was. Witness heard this in his capacity as head of the Experimental Department of the Harvester Company.

Witness further testified:

“Q. Now, did you ever have any talk with your son Joe about doing anything, or anything that he had done to overcome these troubles in the early equipment?

A. I did, sir. The complaints were so many that I called his attention to it, and said that unless something was done, from the reports that we had, we would have to quit—

Q. Have to quit what?

A. Quit putting those out, those magnetos.

Q. Now, what developed as the result of that conversation between you and Joe?

A. I asked Joe why he did not do something at the factory to remedy that, and I remember very well he said, well, that was not his part of the business.

Q. Now, did he talk with you at any time later about any-

thing he had done to overcome the troubles and the difficulties?

A. No, but at that particular time he went to work right away to make drawings.

Q. How did you know that?

A. He showed them to me.

Q. What did he say about them, or what did you say, at the time those drawings were shown to you?

A. Well, I really did not know very much about them, but I asked him to submit those to Mr. Webster, which he did.

Q. I will ask you to look at this paper, marked Plaintiff's Exhibit No. 17, and ask you whether you recognize or can identify it.

(Exhibit 17 shown witness.)

395 A. Yes, sir, that looks like the drawing that he showed me.

Q. Did he afterward show you other drawings relating to the same general subject matter?

A. I do not remember seeing anything else except this original drawing, that he made at home.

Q. Did you see him at work on this drawing?

A. Oh, yes.

Q. Did he talk with you, or explain to you what this drawing showed, or what his idea was in making it?

A. I think he did, in a general way, but I do not think he went into details.

Q. Can you recall and can you state now what he said to you about this drawing, or what it showed, at that time?

A. Yes; I remember the change that he said he made, mounting it on the spark plug, or whatever you call it, instead of on the side of the engine, that that was his plan.

Q. What else did he say about his plan, or about the drawing?

A. I do not think he went into details with me at all, sir.

Q. Were you in the habit of keeping a diary or memorandum book in 1909?

A. Yes. I usually kept a little memorandum book, so as to—

Q. Have you looked recently to see whether you could find some such book covering this period of time?

A. I did, sir.

Q. Did you find it?

A. Yes, I found one.

Q. Have you that here.

A. I have.

Q. Now, by reference to that book, or to any other circumstances, will you state as nearly as you can when it was that your son Joe first showed you and talked with you about this drawing which you have identified, this Plaintiff's Exhibit No. 17?

396 A. I have got the memorandum book of 1909 right here, and the first memorandum here in reference to the magneto is April 14th, 1909, it says, 'Cavanaugh: Joe has worked out a much simpler attachment of magneto to engine.' Cavanaugh, by the way, was my assistant in the Experimental Department, and was looking after that class of work, that is, engines and magnetos and all that stuff.

(The witness produced a memorandum book.)

Q. Who made this entry you have just read from your memorandum book?

A. I made it myself, sir.

Q. When did you make that?

A. April 14th.

Q. What was the purpose of your making that entry?

A. So as to call Mr. Cavanaugh's attention to it.

Q. Did you do that?

A. Yes, sir.

Q. What did you say to Mr. Cavanaugh?

A. Substantially what this memorandum refers to.

Q. Now, following your son's talk with you about the drawings, or drawing, and following your talk with Mr. Cavanaugh, as you have said, when did you next learn of any further development of the plans at which your son had been working?

A. From the statements made by my son I understood that they were to take it up right away, and make one.

Q. What did he say to you, to give you that idea?

A. That when he showed the drawings to Mr. Webster—he was favorably impressed, or words to that effect; and they were also submitted to Mr. Cavanaugh, and he thought well of the plan; and that they were going to start right away to make some.

Q. Did you see presently an equipment made in conformity with Joe Kane's drawing or plans, as he discussed them with you?

397 A. Yes. Sometime later I saw the magneto made in conformity with those drawings in operation at the Webster factory.

Q. What do you mean, when you saw it in operation?

A. According to the memorandum here (indicating book), I saw that on May 13th, 1909.

Q. What memorandum do you refer to? Will you read it?

A. It is headed 'magnetos: The late style put on a six-horse-power worked well. Will not work on a hopper cooled will have to be redesigned to fit hopped cooled.'

Q. Is that the whole of that memorandum?

A. Well, that is the whole of the memorandum so far as it refers to that test.

Q. When was it you made this notation that you have just read in this memorandum book of yours, this one of May 13th?

A. May the 13th.

Q. 1909?

A. Yes, sir.

Q. Will you state in a general way what your purpose was in making these entries in this little book from time to time?

A. Why, I had no special purpose at that time, except that those matters would come up later on with the Harvester Company, and I wanted to be able to tell them just when I saw it, and give them information.

The Court: State whether the entries were correctly made at the time you made them.

A. They were, your Honor. They were my best judgment, at the time they were made.

The Court: That makes the book all right as evidence, if he cannot recollect, if his recollection is not refreshed.

Mr. Williams: Q. Now, do you have an independent recollection of the fact of having seen, at or about the time
398 we have referred to, a magneto equipment in conformity with your son Joe's invention, having been tried upon an engine, and having seen it in operation, as you have stated,—that is, independent of this memorandum book do you remember having seen it in operation?

A. Oh, yes, I remember that, sir.

Q. Now, when was it you saw it? As a matter of independent recollection, how would you fix the date?

A. Well, I could not really give you an exact date, but it was some time after, of course, seeing these original drawings.

Q. Now, was it soon after, or a long time after?

A. Oh, it might have been a month.

Q. That would be your best independent recollection?

A. Yes, sir.

Q. You heard the testimony, did you, about your having been in Milwaukee, and having seen Mr. Waterman, with a magneto equipment of Joe's invention?

A. Yes, sir, I heard that testimony.

Q. Do you recall being in Milwaukee for some such purpose?

A. I do, sir. I remember going there with Joe.

Q. Now, how did you happen to go?

A. I had some other matters to look after at the time, and Joe told me he was going. So I arranged that we would go together.

Q. Did you see Mr. Waterman there with Joe?

A. Yes, sir.

Q. What was said at the time of that meeting?

A. I do not remember, sir, what the conversation was.

Q. What did it relate to?

A. The fact that Joe had a sample magneto with him that he wanted tried out.

Q. Did you see that sample, at the time?

A. Yes, sir.

399 Q. Can you describe it? What was that sample?

A. It was the same as indicated by the drawings that I referred to.

Mr. Bulkley: Q. What drawings, Mr. Kane?

A. These drawings that he made at home, when he said he was going to change.

Mr. Williams: Q. Do you remember anything more of the conversation with Mr. Waterman at the time of that visit?

A. No, I do not, sir.

Q. Have you any way of stating the date of that visit at Milwaukee, or the approximate date?

A. Not unless I had it in this book here, I could not give you the date.

Q. Will you look and see if you find anything there which will enable you to fix it?

A. (Examining book) This is about the closest that I can come to it; this is May the 22nd (reading): 'Waterman here today; says that the magneto as put on the engine is a good job, and says he believes it better than anything that

they had done or could do.' That memorandum was made on the 22nd of May; so it must have been prior to that time.

Q. You mean prior to that time that you were in Milwaukee with Joe?

A. Yes, sir.

Q. Now, what was the occasion of your making that entry on May 22nd, as you have just read it?

A. The only particular object would be to call Joe's attention to it, and tell him about it.

Q. That entry reads in part, as you have stated it, 'Waterman here today'?

A. Yes, sir.

400 Q. What did that mean to you, at the time you made the entry?

A. It did not mean much of anything to me.

Q. Well, who was the Waterman referred to?

A. The gentleman that testified here yesterday.

Q. Now, the entry reads 'here.' Where does 'here' mean?

A. Chicago.

Q. Did you see Mr. Waterman here in Chicago on May 22, 1909?

A. Yes, sir.

Q. Did you talk with him on that date?

A. Yes, sir.

Q. Now, what did he say about this magneto equipment of Jae's?

A. I do not remember just what he said, sir.

Mr. Bulkley: Just a moment.

A. This was the outcome, or the result,—what I noted on the book here.

Mr. Williams: Q. Was it your idea, in making the memorandum which you have read under the date of May 22nd, to put down the substance of Waterman's talk with you on that date?

A. Yes, sir, that was the purpose.

Q. Now, that memorandum reads in part that Waterman says 'He believes it better than anything that they had done.' Whom did you have in mind as 'they' at the time you made that entry?

A. Why, that would be the department in Milwaukee.

Q. The Harvester Company's department there?

A. Yes, sir.

Q. Do you find in this memorandum book of yours any other entry relating to this work of your son's?

A. No, sir, I think that is all.

Q. Will you look under the date of May 17th, 1909, and see if you find anything there that has a bearing upon this matter?

401 Mr. Williams: Q. Now, what about May 17th?

A. May 17th, 1909 (reading): 'Webster called; he is well pleased with the work you have done for him on the magneto.'

The Court: The same construction would apply to that.

Mr. Peaks: What is that?

The Court: It is merely to fix a date, and not to show anything else.

Mr. Williams: Q. Now, what was the occasion of your making that entry,—on that date, as I take it?

A. So as to call Joe's attention to it, sir.

Q. Who is the Webster referred to there?

A. The gentleman right here (indicating).

Q. T. K. Webster?

A. Yes, sir.

The Court: That is the only purpose for which it is in the record,—to show a date.

Mr. Peaks: It is to enable the witness to refresh his recollection, so he can testify to it—

The Court: Yes, I suppose that would be the better way.

Mr. Peaks: The entry itself is not competent.

The Court: Yes.

Mr. Williams: Q. Now, what magneto or what work did you refer to in making that entry on May 17, 1909?

A. The work that Joe had done on this particular type of magneto.

Q. And about which you have been testifying?

A. Yes, sir.

Q. Now, at the time that you saw this new machine of Joe's in operation on an engine at the Webster Company's factory, who were present, in addition to yourself?

A. Mr. Cavanaugh, Mr. Webster, Joe Kane, and there were some other parties, but I do not remember their names.

402 Q. How did the magneto equipment which you saw in operation on this engine at the Webster Company's

plant compare with the magneto equipment which Joe Kane took to Milwaukee with you, at the time of your conversation with Mr. Waterman, as you have described it.

A. I understood that they were the same, sir.

Mr. Bulkley: That is objected to, your Honor, and we move to strike it out. He says he understood they were the same; he does not know anything about it.

The Court: That may be stricken out.

Mr. Williams: Q. Well, let me ask you, as a matter of your own recollection, based upon having seen the equipment on the engine, and the equipment which Joe Kane took to Milwaukee, how they compared with one another?

A. I was not very familiar, thoroughly familiar, with that class of work, and I did not examine closely into those things at all, so that there might be some slight variations, and I would not know anything at all about it, and consequently I cannot testify on that.

Mr. Williams: Q. Well, was there any similarity between the two, as you recall the matter?

A. According to my recollection, sir, they were the same.

Q. You are willing, are you, that counsel should examine this memorandum book from which you have read?

A. Yes, sir.

(Witness hands book to counsel.)

A. Those slips are in there where those memorandums are, but he can see anything that is in the book.

Cross-Examination by Mr. Bulkley.

Q. Mr. Kane, you testified as a witness, in behalf of
403 your son, did you not, in an interference proceeding relative to this invention, between Mr. Milton and your son?

A. Yes, sir, I did.

Q. Do you remember whether you had that memorandum book that you have produced today, at the time that you testified in that interference case?

A. Yes. I must have had that, sir.

Q. Do you remember whether you made any reference to it in your testimony in that case?

A. I do not think I did.

Q. Why not?

A. I never thought about the memorandum book at the time.

Q. You did not know that you had the entries in there?

A. No, sir.

Q. Is that it?

A. I did not.

Q. Now, when was it that you discovered the materiality of these entries in this book? Was it after, as I understand, you had testified in this interference case?

A. It was just a few days ago, that I happened to think that I might have something along that line, and I looked up a lot of old memorandums that I had, and I succeeded in getting this one.

Q. And you did not happen to think that this memorandum book of yours had any pertinency at the time that you testified in the interference case, did you?

A. I do not think I did, sir.

Q. No. How long have you been head of the Experimental Department of the International Harvester Company in Chicago?

A. Since 1905.

Q. In connection with your duties as the head of that Experimental Department, you are brought in touch considerably with patent matters, are you not?

A. Quite a good deal, sir, yes, sir.

Q. Haven't you taken out a number of patents, yourself?

A. I have, sir.

Q. Did you ever get into any interference proceedings in connection with any of the applications for patents which you have made?

A. I do not remember, sir.

Q. Haven't you had considerable to do in connection with interference cases relative to matters of the International Harvester Company?

A. No, sir.

Q. Well, what has been the nature of your duty which has brought you in touch with patents in connection with the International Harvester Company? What are your duties that would bring you into touch with patent matters, as head of the Experimental Department?

A. Very little, sir, that would bring me in touch with the patents, because those matters were all referred to the Patent Department.

Q. Weren't you called in by the Patent Department to consult with them about matters relating to inventions, at all?

A. Yes, to inventions, yes, sir.

Q. Yes.

A. Yes.

Q. Which inventions were to be patented, were they not, by and through the Patent Department?

A. Yes, sir.

Q. Now, before you went into the employ of the International Harvester Company, what were you doing?

A. I was connected with one of the Harvester Companies that were taken into the International Harvester Company.

405 Q. What company was that?

A. The Champion.

Q. And what were your duties there?

A. I had charge of the experimental work for several years.

Q. Did you have anything to do with the getting out of patents?

A. Yes, sir.

Q. For that company?

A. I did, sir, in those days.

Q. Now, what was it that you had to do with the getting out of patents for that constituent company?

A. Well, I referred them to the patent attorneys, and they looked after the work, of course.

Q. Well, what did you do with the patent attorneys?

A. Just had the drawings made, and put them right to them, and explained them to them.

Q. You told them, did you not, what you thought the features of the invention were of the most importance, and discussed the matters generally with them?

A. Yes, sir, I did.

Q. Didn't you do that, and haven't you done that for some time, with the Patent Department of the International Harvester Company?

A. No, sir.

Q. Who does that?

A. Why, the party that done the inventing.

Q. And you have nothing to do with that at all?

A. No, sir.

Q. I understood you to say, Mr. Kane, that when your son produced this drawing,—or you saw him making the drawing?

A. Yes, sir.

406 Q. That Sunday afternoon, in the house. Did you ask him what he was doing, while he was making that drawing?

A. Why, I do not remember, sir, but I presume I did. At least I knew what he was doing.

Q. Did he tell you?

A. Yes, undoubtedly. I saw him at work.

Q. Don't you know whether he did or not? You have no recollection?

A. Oh, no.

Q. You say he did not explain to you that drawing in detail at that time?

A. I am quite sure he did not, sir. I would not understand it very well, if he did, so there would not be any—

Q. Why wouldn't you understand it?

A. Because I did not know much about the engine business, or the magneto.

Q. Didn't you know enough about the engine business and the magneto to be able to read a drawing when it was shown to you, and understand, with the aid of his explanation, what it was all about?

A. Oh, I think I would, sir.

Q. Yes.

A. Yes.

Q. You did not take enough interest in what your son was doing to find out in detail what was shown in that drawing, did you?

A. No, sir, I did not know enough about it to take very much interest in it.

Q. Well, I ask you again, Mr. Kane, if you could not have understood what your son was doing, and what he had illustrated in the drawing, if he had given you an explanation, and you had had the drawing before you.

407 A. I believe I would, sir.

Q. Then again, I ask you why it was that you did not take enough interest in what your son was doing at that time, what he was making a drawing of, to ask him to explain it to you, and look at the drawing, and get an understanding of it? You did not take enough interest in it to do that, did you?

A. No, sir, I did not.

Q. You had suggested to your son, did you not, that he

should proceed to apply his mind to overcome some grievous difficulty, in the Webster Company's manufacture, did you not?

A. Yes, sir.

Q. In connection with the way of attaching or securing the magneto and the plug to the engine?

A. No, I did not. I did not know anything about that.

Q. Hadn't you ever seen a plug and magneto attached to an engine at any time before you saw—before you had that conversation with your son, in which you directed him to apply his mind to it?

A. No, sir, I did not.

Q. You had never seen an engine? Had you ever seen an engine with a magneto and a plug working together, at the International Harvester Company, prior to the time that you had the talk with your son?

A. No, sir.

Q. So you did not know what the structure was that he illustrated in the drawing on that date, on that Sunday afternoon that he made it?

A. Only in a general way, sir.

Q. Well, what way? What did you know about it?

A. That he was trying to remedy the difficulties we were having with the magneto that we were then using.

408 Q. And you did not ask him how he did that, or remedied that difficulty, did you?

A. Oh, I presume I did, but I do not remember just now the—

Q. Now, when did you first learn what you now say your son had done on that Sunday afternoon, in detail, and with regard to what it was that he had done? How soon after that did you learn about it?

A. I really do not know, sir. I could not tell you.

Q. Well, can't you give me some idea about how soon it was? I do not ask you for the precise time.

A. I know they went to work at it right away, I remember that, and produced the magneto, and as I have already stated, I saw it in operation.

Q. Now, Mr. Kane, you just told me a moment ago, and you told the same thing on your direct examination, if I am correct,—and I do not want to hurry you; if I am incorrect in any statement that I make I want you to correct it; you told me a moment ago, and you stated on your direct exam-

ination, that you did not know what your son had illustrated in this drawing, when he made in on that Sunday afternoon; is that right?

A. No, I do not think that is just exactly correct.

Q. Well, now, then state it.

A. I knew in a general way, undoubtedly, when I saw that drawing, and of course, he explained it to me, but as to what the details were, or just how it was accomplished, I am quite sure I did not go into that.

Q. Well, you now say that he explained it to you?

A. Oh, he must have told me something about it, of course.

Q. I am asking you for your present recollection.

A. Well, it is pretty hard—

Q. Not as to what he must have done or doubtless did do.

409 A. It is really pretty difficult to recollect just the conversations that took place ten years ago.

Q. That is very true, Mr. Kane. That is very true.

A. I do not like to testify to that.

Q. That is very true.

A. I could make the statement, of course, and probably it would not be contradicted, but I will not do that.

Q. Do you have now any present recollection as to when it was when you first learned what your son had done on that Sunday afternoon in detail?

A. No, I could not state, sir, exactly when that—

Q. I am not asking you to state it exactly, and I will say again how, can you state it approximately, or as near as you can? And if you have no recollection, you can say so.

A. I know that the thing was adopted, and very soon after this first drawing was made.

Q. That is what you said before. Pardon me.

A. That they started in to make patterns, and the complete magneto was produced very soon after.

Q. Now, I am not asking you as to when they adopted it, or when it was adopted by the International Harvester Company, but when did you first learn, as near as you can now state, what it was that your son had done, on this Sunday afternoon, in detail?

A. I do not think, sir, that I ever went into it in detail at all.

Q. Well, how far did you go into it?

A. Oh, just a general way, looking it over.

Q. What do you mean by a general way? How much did you learn about it, when you looked it over in a general way?

A. Well, I could see that it was attached to the engine.

Q. Is that all?

410 A. —different from the other.

Q. Different than the other?

A. Yes, sir.

Q. Is that all you ever learned about it?

A. Substantially.

Q. At any time,—that is all you knew about it?

(Witness nods.)

The Court: Did you hear that nod over there?

Mr. Bulkley: Q. Mr. Kane, didn't you tell your son something that he ought to do, with reference to getting out the patent on this thing, which you say he had invented?

A. Yes, sir, I did.

Q. What did you say to him? What did you tell him?

A. I told him he had better apply for a patent.

Q. Is that all you told him about it,—to do?

A. And who to submit it to,—file the application.

Q. Who was that? Who was that that you told him to submit it to?

A. It was the firm of Brown, Nissen & Sprinkle.

Q. Had they been taking out patents for you, that firm?

A. Yes, sir, in former years.

Q. Did you go with him to see the patent attorneys?

A. I think I did, sir.

Q. When? How long was it after that Sunday afternoon when he produced this drawing?

A. Oh, it was quite a while after that.

Q. How long after?

A. Probably six months. It might be longer. I am not—

Q. Did he tell you what Mr. Webster had said about the invention not being patentable?

A. He did, sir.

Q. Did you express your opinion to your son upon
411 that phase of the question?

A. I did, sir.

Q. What did you tell him?

A. I told him I thought that he could get some sort of a patent on it.

Q. You said that on general principles?

A. On general—

Q. Or from your knowledge of this device?

A. On general principles, sir; not from my knowledge.

Q. Did you ever have any talk with the patent attorneys about it, the application which he was going to make on this thing?

A. Well, I presume I did; that is—

Q. I am not asking for your presumption, but for your present recollection.

A. I do not recollect, sir, what I said to the attorneys, but I am quite sure that I went with my son, and told them that he had this device.

Q. What device did you tell them that he had?

A. The magneto. And to have him file an application on it. Outside of that I do not think I went into any of the details, or—

Q. Did your son ever tell you that he had made an invention in connection with means whereby to cut out the spark of the magneto, when there was no charge in the engine cylinder?

A. I understood that that was one of the features.

Q. When did he tell you that that was an invention which he had made?

A. I could not tell you, sir. I do not remember.

Q. How long before, about how long before you went to the patent attorneys with him?

A. I do not know whether it was before or after. I could not state positively.

412 Q. Did he tell you anything about that, on the Sunday afternoon that he made this drawing?

A. I do not remember, sir.

Q. Did he tell you about that before the time you went to Milwaukee with him?

A. I could not state just when he told me.

Q. I am not asking you to state just when he told you, but I am asking you to state, if you can, whether he told you just before you went with him on the trip to Milwaukee or not.

A. I don't remember, sir.

Q. Now, when you went with him, as you say, to see the patent attorney, did you have any discussion with him about this invention for cutting out the spark of the magneto when there is no charge in the engine?

A. I think not.

Q. You are sure about that, are you?

A. Quite sure.

Q. You remember that distinctly, do you?

A. No, I don't remember it so distinctly. But I knew so little about it, that I am quite sure that I would not start to discuss it.

Q. Didn't he explain that to you prior to the time you went to the patent attorney?

A. I don't know.

Q. What did he say to the patent attorney was the invention that he wanted them to get a patent on?

A. I don't remember sir.

Q. What did you tell the patent attorney that you wanted your son to get a patent on?

A. On that magneto.

413 Q. Now, when you say a patent on that magneto, what do you mean?

A. I mean on the magneto made from this drawing that we have been referring to.

Q. Did you have any discussion with the patent attorney as to whether that was an invention, or whether you could get a patent on that or not?

A. I did not.

Q. You had previous to that time, had you not, had a conversation or knew of the fact that Mr. Webster had turned down Joe's invention because he said it was not patentable, did you not?

A. Joe told me that, yes, sir.

Q. Yes. You had told Joe to go and see the patent attorneys; that on general principles you thought he could get a patent?

A. Yes, sir.

Q. Then you went with Joe to the patent attorney?

A. Yes, sir.

Q. And you don't remember now whether you said anything to the patent attorney about this question, as to whether it was an invention on which you could get a patent or not, is that right?

A. That is substantially correct, yes, sir.

Q. Didn't you know anything more about this supposed invention of Joe's at the time you went to the patent lawyer, than that it had something to do with the way of fastening the magneto to the plug on the engine?

A. That is the only thing that I remember, sir.

Q. And that is all the knowledge you had of this invention of Joe's, when you went to see the patent attorneys with him?

A. I think that is substantially right.

Q. Did you ever see the specifications and claims that were drawn up by the patent attorney?

414 A. I don't remember seeing them, sir.

Q. You don't remember having looked at them, or having looked them over, to see what sort of a job they had done, in view of the experience which you had had previously in connection with patent matters; you don't remember doing that?

A. I don't think I did so.

Q. You don't think so—pardon me for repeating your answers. Now, when you went down with Joe to the Milwaukee works and saw Waterman, as I understand you did, how much did you know about this invention of Joe's at that time? Anything more than that it was some way for fastening the magneto and plugs on the engine cylinder; did you know anything more than that at that time?

A. I don't think I did, sir.

Q. Now, was it after that that you went to see the patent lawyer with Joe?

A. Oh, yes.

Q. Now, don't let us get confused. Let us see if we get it straight: So that at the time you went to see the patent lawyers with Joe, all you knew about his invention was that it was a means or some way of securing the magneto and plug to the engine; that is right, isn't it?

A. That was the general idea that I had.

Q. And that was all you had?

A. No, I wouldn't be sure of that.

Q. What more did you have?

A. I don't remember anything more than that.

Q. When did you next see this drawing, Exhibit 17—is that it—after you saw it on the Sunday afternoon when your son was making it; when did you next see it?

A. I think it was when they had the interference case
415 up, sir; I have no recollection of seeing it at any other time.

Q. Did you look at this drawing with any degree of care on that Sunday afternoon when he showed it to you?

A. No.

Q. You just looked at it casually, did you?

A. Just in a general way, that is all, sir.

Q. That is what I thought. How do you identify that drawing as being the same one, or like or similar to the one you saw on that Sunday afternoon when your boy made it?

A. About the only thing I would recognize was the way of attaching it to the spark plug; that was the one thing that attracted my attention. The details I paid no attention to, because I didn't understand that particular line of work.

Q. Now, you say you identify it by the way in which the spark plug was attached to the engine. State what that identification is. What is there about the attachment of the spark plug to the engine, by means of which you identify that drawing as being the one that he made on that Sunday afternoon?

A. This magneto was mounted on the spark plug; that is the feature of it.

Q. And that is all you know about this drawing?

A. Practically all, sir.

Q. Do you know who paid the patent lawyers for their services in preparing this application and filing it for your son? Did you?

A. I might have handed him the money, but I think that E. J. Kane was the fellow that produced it.

Q. Out of his \$75 a month?

A. I presume that is where he got it.

Mr. Bulkley: If your Honor please, I hold in my hand a letter from Mr. Waterman to Mr. Maurice Kane, which I believe was identified by Mr. Waterman on the witness stand yesterday, but which I did not mark for identification, when it should be offered in evidence. I will ask that it now be marked for identification as Defendant's Exhibit 2. I will now ask to have this letter marked for identification as Defendant's Exhibit 2, this letter, which purports to have been written and sent to the witness by Mr. Waterman.

(Said letter was then marked for identification Defendant's Exhibit 2.)

Mr. Bulkley: Q. I will ask you to look at this letter marked for identification Defendant's Exhibit 2, which purports to have been written and sent to you by Mr. Waterman (handing Defendant's Exhibit 2 for identification to the witness.)

Mr. Williams: May I get this straight. You have not yet offered this letter?

Mr. Bulkley: No, I have not.

The Witness: I may have seen that, sir, but I don't remember it specially.

Q. You probaly did see it, didn't you, Mr. Kane?

A. Yes, very likely, sir; but my assistant Mr. Cavanaugh was looking after that work, so I didn't pay much attention, but when I received letters on magnetos and engines, and things like that, I usually referred them to him.

Q. This subject matter was within your jurisdiction, within the jurisdiction of your department, was it not?

A. Yes, sir.

Q. But you turned it over, if I understand you, to Mr. Cavanaugh and paid no further attention to it particularly?

A. That was the custom.

Q. Although you were head of that experimental department and that subject matter was under your jurisdiction, you didn't know anything about what they were doing in connection with this subject matter, is that right?

A. I would have a little knowledge, but I would not know exactly—

Q. How much would that knowledge be, how extensive?

A. I would know in a general way what they were doing, but I would not follow the details. The business was too large for any one person to do that.

Q. Did you ever follow it any more than to know that what they were doing was mounting the magneto on the plug; is that as far as you ever went into it?

A. I paid very little attention to it, sir.

Q. Can't you answer the question? If not, say so. Did you go into it any farther than to learn they were mounting the magneto on the plug?

A. That seemed to be the general thing, and that is all I paid any attention to.

Q. That is all you know about it?

A. Yes, sir.

* * * * *

Q. You know Mr. Waterman's signature when you see it?

A. Yes, sir.

Q. Is that his signature?

A. Yes, sir.

Q. Was that letter received by you in the ordinary course of business? Did you answer that question?

The Witness: No, sir.

Mr. Williams: What was that?

Mr. Bulkley: He said he had not as yet answered it.

A. I don't see anything here that would recall my having ever seen this, but I notice Mr. Kimbark—'E.H.K.'; it is marked here—seemed to handle it; but I don't remember it.

418 Q. Would it not have been handed to you for your inspection and knowledge of its contents in the ordinary course of business?

A. No, it might not be.

Q. It would have gone to your department, wouldn't it?

A. Oh, yes.

Q. Now, your son Joe says that when you were there together on that Sunday afternoon, and he was making this drawing, that you told him out of the abundance of your experience in connection with patent matters, I suppose, you told him to put his name on that matter, with the date when he made it. Do you remember having said that to him?

A. No, sir, I don't remember it; but I would be very apt to do that from what I knew of the patent business.

Q. Well, from what you knew of the Patent Office business, wouldn't it be a much better precaution to preserve his rights if you had put your name on it?

Mr. Williams: I object. I do not know why this witness should be called upon to express an opinion as to what would have been better.

The Court: Go on.

Mr. Bulkley: Sir?

A. Well, I believe it would, sir.

Q. Why didn't you put your name on that drawing?

A. I don't know, sir. I don't remember just—

Q. How do you happen to know that it was Sunday afternoon when your son Joe made this drawing, that you have identified?

A. That is the only afternoon that he was home.

Q. And you are sure, are you, that it was Sunday afternoon when he made this drawing?

A. Yes, sir.

Q. Did you ever have any talk yourself with Mr. Webster about this drawing, about this invention of Joe's,—I
419 mean Mr. T. K. Webster?

A. Oh, yes, I am quite sure that I discussed the matter with Mr. Webster; that is, the magneto, not the patent; I didn't talk that with him at all.

Q. What was the nature of that discussion and talk that you had with him about the magneto?

A. I couldn't tell you right now, sir; I don't remember.

Q. Generally do you know anything about it?

A. Practically not, except that Mr. Webster called occasionally at the office there and we would have a little conversation. Just what it was I don't know, I don't remember now.

Q. Of course, I am not asking you to tell me about the general conversations that you had, but put your mind back there now and see if you can remember anything with reference to what you and he talked over concerning Joe's invention at any time?

A. I don't remember, sir, what it was.

Q. But you do remember that you did talk with him about Joe's invention?

A. Why, yes,

Q. Several times, you say?

A. Yes.

Q. Do you remember that you told Mr. Webster that Joe had made an invention?

A. No.

Q. And you have absolutely no recollection at all as to anything concerning these conversations which you had about Joe's invention?

A. No, I couldn't possibly repeat it.

Q. I am not asking you to repeat it, Mr. Kane. That would be impossible after the lapse of ten years. But you don't know and haven't any idea with respect to what conversation you may have had, what it was about, or anything
420 concerning it, except that you talked with him about Joe's invention. Is that so?

A. That is about all, sir, that I could—

Q. It was called to your attention, was it not, frequently along in 1908, when they were selling the old Milton magneto that there was a good deal of trouble in connection with?

A. Yes, I have seen reports on that.

Q. Did you make any investigation to determine what that trouble was?

A. No, I did not personally.

Q. You handed it all over to Mr. Cavanaugh, did you?

A. Yes, sir.

Q. And you did not concern yourself with it at all, is that right?

A. Only in a general way.

Q. What general way?

A. Well, I was responsible for the department, and I had to do something to see that things were righted.

Q. Did you do anything more to see that things were righted except to hand it over to Mr. Cavanaugh?

A. That was practically all, sir.

Q. Now, here is a letter marked for identification Defendant's Exhibit 1. I ask you if that is signed by Mr. Waterman.

Mr. Williams: What is that question?

(Question read.)

A. Yes, sir, I believe that is his signature.

Mr. Bulkley: Q. How, that is directed to the experimental department, Harvester Building, Chicago. That is your department, isn't it?

A. Yes, sir.

Q. And such a letter as that would be sent to your department and considered either by you or your assistant; that's right, isn't it?

421 A. This would be referred to my assistant without—

Q. Did you ever see that letter?

A. I don't know, sir; I couldn't tell you.

Q. Have you looked it over to see?

A. Yes, I have no recollection of seeing it.

Q. Now, when you went to Milwaukee with your son, did you see any test made there of this invention of your son at that time?

A. I don't remember seeing a test.

Q. Did you ever see any test made of that invention at any time?

A. Yes, I saw it at the Webster plant; I remember it there.

Q. Was that before or after you went with your son to Milwaukee?

A. I think that was before going to Milwaukee.

Q. Now, who was present at that test that you saw?

A. Mr. Cavanaugh, Mr. Webster, Joe Kane and myself, and there were some others, I don't know who—

Q. What were you all assembled there for; what was the purpose of getting that assemblage together on that occasion?

A. Just to see the operation of the magneto on the engine.

Q Did you observe that test at that time and carefully consider what was the result of the test?

A Yes, I saw the test.

Q And you discussed it with the others, all who were there at that time, or did you?

A I don't remember any discussion that we had on the subject. But it would be very reasonable that we talked it over.

* * * * *

Redirect Examination by Mr. Williams.

Q Let me ask you, Mr. Kane, what class of machinery you were devoting your attention to when you were with the Champion Company prior to 1905.

422 A Confined entirely to harvesting machinery.

Q After you went to the International Harvester Company, and after the Champion Company was absorbed into the International Harvester Company, what class of machinery did you devote your own time to specially?

A Harvesting machinery, sir.

Q Now, the Harvester Company had how many manufacturing plants; or did it have more than one manufacturing plant?

A Oh, they had about a dozen different plants.

Q And you were located here in Chicago at the Chicago office or plant, were you, from 1905 until the present time?

A Yes, sir.

Q Now, does the Chicago plant, or do the Chicago plants manufacture gas engines, do you know, or are they made elsewhere?

A They were made principally in Milwaukee.

Q What class of machinery was manufactured here in Chicago, to which you devoted your personal attention largely?

A The principal parts of harvesting machines were made in Chicago, at the Deering and McCormick works.

Mr. Williams: That is all.

JAMES A. MUNN, called as a witness on behalf of the plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 57, residence Racine, Wisconsin. Employed by Webster Electric Company on experimental work. Connected with that company and its predecessors from a date just prior to their removal to Tiffin, Ohio, in 1909. Acquainted with E. J. Kane, who was brought up to the shop and introduced to the witness by Mr. Milton and turned over to charge of the witness. This was at the plant of the Webster Company at 15th Street and Western Avenue, Chicago.

423 Witness worked for Webster Company for a good many years before the Webster Electric Company was organized. In 1909 had charge of the construction of magnetos and also experimental work. The Milton previously mentioned was John L. Milton. He had charge of the magneto work. Was the immediate superior of witness.

Witness recognized cuts appearing in the pamphlet marked Plaintiff's Exhibit 13 as representing the magneto as located on a Harvester engine with a separate connection with the igniter plug. First became familiar with that apparatus when witness made it about the latter part of 1907 or the early part of 1908. The apparatus was manufactured and sold by the Webster Company following that date.

The witness further testified:

"Q Do you know anything about a form of apparatus which was subsequently manufactured and sold by the Webster Manufacturing Company in lieu of this apparatus disclosed in this pamphlet, Plaintiff's Exhibit 13.

A Yes, sir.

Q Will you state what you know about that apparatus, how it first came to your attention, under what circumstances and what followed.

A Before it was manufactured or afterwards?

Q Before it was manufactured.

A Before it was manufactured—E. J. Kane came to me one day and said that he thought he could get up a magneto and plug in which the magneto was mounted directly on the plug doing away with the trouble we were having with magnetos in the field, with the old construction. I told him that

he would better go ahead and make that up; better make up drawings and I would make up a plug from those drawings; and we would try it out.

424 Q You told him that, did you?

A I told him that, yes, sir.

Q What happened then?

A That was in the early part of 1908, I should say.

Q I say, then what happened?

A Then what happened?

Q Yes, sir.

A One day—he made up the drawings and I got the patterns made from the drawings, and got castings from the foundry, and machined up the castings, and made the plug according to the drawing.

Q After you had made one up what was done with it?

A We placed it on the Harvester engine which had been placed at our disposal and tried it out.

Q Where was that done?

A That was done on what we called the fifth floor of the new building of the old factory out at 15th and Western Avenue.

Q Of the Webster Manufacturing Company?

A Yes, sir.

Q Did you make up more than one of those samples?

A I only remember the one.

Q Did you have anything to do with the subsequent manufacture of an equipment of that general character?

A I think not.

Q Was that within your province?

A Yes, sir, I was employed—I was occupied with other work at that time.

Q You say that Kane made a drawing from which you made this first sample?

A Yes, sir.

Q Did you see that drawing?

A Yes, sir.

425 Q While it was being made?

A While it was being made.

Q Who was making it?

A Mr. E. J. Kane himself.

Q Where did you see him doing that?

A On the fifth floor of the new building in the old plant.

Q I call your attention to the paper which has been of-

ferred in evidence as Plaintiff's Exhibit 17, and ask you whether you recognize that or can identify that?

A I don't think I have ever seen this, but I cannot state positively.

Q I call your attention now to a paper which has been marked Plaintiff's Exhibit 18, and ask you whether you recognize or can identify that?

A To the best of my knowledge it is his drawing, that was made by E. J. Kane at that time.

Q And the one upon which you saw him at work?

A Yes, sir.

Q Did you have any talk with Kane about the machinery disclosed in this drawing at the time you was working on the drawing?

A Why, we was discussing it from time to time as he drew it up.

Q What did you say,—he or you?

A I can't remember any particular conversation. I may have offered some suggestions as to the details of it for manufacturing.

Q Do you understand drawings? Are you capable of reading them?

A Yes, sir.

Q So that you know what that drawing shows?

A Yes, sir.

Q Did you know at that time?

A Yes, sir.

426 Q How did the machine which you say you made, the sample machine, compare with the machine as shown in this drawing Plaintiff's Exhibit 18?

A As I recollect it, when it was finished it was identical with the drawing. I think there were no changes made.

Q Did it contain anything more, that first sample machine, than is contained in this drawing (indicating)?

A I do not see the electrodes shown in this drawing and they were certainly in the machine, or the machine would not have worked; but outside of that, so far as I can see, it is as we made it.

Q Can you indicate where upon this drawing the electrodes appear to be missing?

A In this view here the rotor—this is the rotor here with a shaft going through—wait a minute—no, the electrodes

would be here where this push finger is connected with the plug; they would be shown right in here.

Q Can you describe briefly the construction of the electrodes, or the parts, with which they were immediately associated, whatever may be missing in this drawing in this regard?

A The electrodes went through two holes. There was a stationary electrode and movable electrode. The stationary electrode was insulated electrically from the body of the plug. The movable electrode was moved by the push finger; that was pushed up by the push rod and opened at a given time with reference to the engine revolution, and a wedge on the push rod was engaged by a roller on the plug which raised the push rod and tripped the trip finger, and the springs would pull it back suddenly at the time the current was generated producing the spark.

Q I call your attention to a piece of apparatus marked Plaintiff's Exhibit 11, and ask whether you recognize that and can identify that?

A Yes, I think that is the apparatus that we made just
427 prior to the one that came to us, and we manufactured, I think, quite a few of them.

Q Is this exhibit, apparatus, here, complete in all its parts just as it now stands?

A No. The connection between the spark plug and the magneto is missing, the connection that came out here to connect with the spark plug.

Q Is the spark plug itself present in this Plaintiff's Exhibit 11?

A No, sir, I don't see it. It is not.

Q There was a spark plug with the equipment, as I understand it?

A I think the Harvester people furnished that. We did not furnish that.

Q Now, I call your attention to a piece of apparatus marked Plaintiff's Exhibit 12, and ask you whether you recognize it, and whether you can identify it?

A I could not tell you just at what time it was made, but it was our apparatus which we manufactured at a certain period.

Q How does this exhibit 12 apparatus compare with the apparatus which you say that you made following Kane's drawing as submitted to you?

A It seems to be a little bit different. But so far as the

general features go, I would say it was practically identical in its workings.

Q When you say it is a little bit different, will you indicate the differences or the sort of differences that you refer to?

A So far as I can see, there is a difference only in the design of the plug itself. This plug, you will notice, has a—the casting goes down there in that shape, which it does not in that one.

428 Q That is—

A That (indicating).

Q That is, the cross section of that is different?

A It is different from what it is in this drawing.

Q Which way was the first sample apparatus as you made it?

A It was made according to the drawing. To the best of my recollection, it was made just exactly according to the drawing.

Q Do you note any differences between that first sample as you made it, and this Plaintiff's Exhibit 12, apparatus?

A There is a cut out on this apparatus that there was not on this (indicating) at that time.

Q Now, when you say that there was not on this, you mean that there was not—

A The manufactured product, as we made it according to Kane's drawing, did not have that cut out at that time.

Q Does this drawing, Exhibit 18, show what you refer to as the cut out?

A Is this drawing Exhibit 18?

Q Yes.

A No, it does not.

Q Now, the first sample apparatus that you made up by hand following this Exhibit No. 18, drawing, did that have the cut out?

A The next one after this, or this one—

Q No.

A I am getting mixed.

Q Listen to my question carefully and take your time to answer it. The first piece of sample apparatus which you made by hand, did that have in it the cut out?

A It did not.

Q It did not?

A No.

429 Q Did you make a sample that did have the cut out later?

A We put the cut out on this sample later; on this same one we put it on later.

Q Did you see that original hand made sample of yours tested, that identical one on an engine?

A I did.

Q Now, when you first saw it operated on an engine, did it have the cut out on it or was the cut out not present?

A The cut out was not present in the first trial.

Q How long after the first trial was it before that was added?

A I would say two or three days, maybe.

Q Then did you see it tried again with the cut out?

A Yes, sir.

Q Where was that?

A At the same place on the fifth floor of the new building in the old plant at 15th and Western Avenue.

Q How did that cut out, as incorporated in that first sample, and as tried at that time, compare with the cut out as it appears here in this Plaintiff's Exhibit 12?

A It was a different apparatus.

Q In what respect different?

A The push rod had two wedges on it, a wedge above and a wedge below, and on the valve rod that went below the push rod, it carried a bracket and roller, and when the valve rod moved the valves it moved up this second wedge on the push rod and converted the cut out so that the push rod did not engage with the push finger, but slipped over the top of it.

Q Now, aside from that difference, can you discover any other differences between this Plaintiff's Exhibit 12 apparatus and the apparatus as you first made the sample of it, and aside, also, from the matter of the shape of the cross section,

of part of this casting, the part which you refer to in your
430 previous testimony, and as marked with the figure "3" in red on the drawing; aside from those two matters were there any differences which you can determine between Exhibit 12, and the apparatus as you first made a sample of it?

A As near as I can see they are substantially identical.

Q What became of that first sample apparatus after it had ben tried on the engine, first without the cut out and then with the cut out?

A From my personal knowledge I don't know.

Q What did you do with it when you had finished with it?

A I think it was left on the engine, if I recollect rightly, and that is so far as I had anything to do with it.

Q Did you put it on the engine yourself, or assist in doing so?

A I am quite sure I did. I think Mr. Kane and I put it on together.

Q Which Mr. Kane is that?

A Mr. E. J. Kane.

Q Now, do you know whether the Webster Company after this first sample had been made and tested, as you have described, whether they then manufactured equipment conforming with the sample?

A Yes, sir.

Q When did they begin that manufacture, if you know?

A Why, I would say within, say, two or three months, maybe after that first sample was made up.

Q How long did it take you after Kane had finished the drawing and turned it over to you to make up this first sample?

A I would say it was finished within three weeks.

Q How soon did the test follow its completion?

A Immediately.

Q Did you do all of that mechanical work yourself in
431 making that first sample?

A I rather doubt whether I did any of it. I think some of my men made it.

Q Were they working under your supervision or not?

A Yes, sir.

Q Now, when was it you made that first sample as you have described?

A You mean the date?

Q Yes, the date if you can give it.

A I could not give the date.

Q Exactly or approximately.

A I could not give you that date exactly, but if the date on the drawing is correct—I don't know that—I would have to take somebody else's word for that—I probably started within a day or two after that day.

Q Aside from the date upon the drawing, what is your recollection as to the year in which you did this work?

A It was in the early part of 1908.

Q What is it enables you to say that it was in 1908?

A I may be wrong; I am only guessing at it. It was

shortly before we moved to Tiffin. I think that was in 1909, if I remember rightly.

Q Which was?

A When we moved to Tiffin. That would make this date 1909. I think I made a mistake there.

Q Do you know when it was in 1909 you moved to Tiffin, as you say?

A I went down in June, 1909.

Q When you say 'We moved to Tiffin', whom do you mean by 'we'?

A The Webster Electric Company, at that time the Hertz Electric Company.

432 Q What relationship was there between the Hertz Electric Company and the Webster Manufacturing Company?

A The Hertz Electric Company were an offshoot of the Webster Manufacturing Company.

Q What was the business of the Hertz Electric Company?

A To manufacture magnetos.

Q Was that its sole business, its only business?

A Its sole and only business, that is, of the Hertz Electric Company.

Q You say you went to Tiffin in June, 1909, for the Hertz Electric Company?

A Yes, sir.

Q What did you do in Tiffin when you first went there?

A We started to make, or we tried to make, high tension magnetos.

Q How long did you remain in Tiffin after you went there?

A Four years.

Q Now, was this first sample of the Kane Machine, as made by you or under your direction, was that made before or after you went to Tiffin?

A Before.

Q How long before?

A Probably four or five months before.

Q I call your attention now to a pamphlet containing some cuts, marked Plaintiff's Exhibit 16, and I ask you to look at the cuts and state whether you recognize the apparatus shown therein?

A Yes, I recognize it.

Q What is that apparatus?

A It is part of the apparatus that we furnished to the Harvester people.

Q When did you begin to furnish the Harvester people with apparatus, if you know?

433 A I would say probably in the fall of 1908.

Q How does this apparatus, shown upon this pamphlet, compare with the first sample of the Kane equipment which you made?

A Just a moment—I guess I am wrong on this—no, it is not the piece of apparatus I thought it was. I did not get all the details of it. I cannot say from memory what time we did furnish the Harvester people with this. Some of the apparatus seems to have been made previous to the time that Kane's drawing was made, but otherwise it seems, the plug seems to be practically the same thing that Kane got up; that rotor there—that is punched out to lighten it up, was, I think, made before Kane's drawing was made.

Q You have not answered just my last question, although you have, perhaps, in part. Let me ask you this: Will you look at the cuts marked 'Illustration No. 4', and 'Illustration No. 5', and state how the apparatus shown in those cuts compare with the first sample of Kane apparatus, which you say you made just a few months before you went to Tiffin in June, 1909.

A It is different.

Q In what respects different?

A The cut out itself is mounted on the magneto arm, whereas in the Kane—the sample we made from the Kane drawing, it was mounted, as I say, on the valve rod.

Q Now, aside from that matter as to the detail of the cut out, how does this apparatus, shown in Illustration 4 and Illustration 5, compare with the Kane apparatus as you made it a few months before going to Tiffin in June, 1909?

A I would say it was similar.

Q To what extent similar?

A Identically the same thing.

434 Q Now, a few moments ago when I asked you, I think when the apparatus shown in this Plaintiff's Exhibit No. 16 was first manufactured and sold to the Harvester Company, you said, I believe, that your recollection was that it was in the fall of 1908?

A No, I had reference to previous apparatus at that time. I see this is different. This was made evidently in the spring of 1909; in the spring or summer of 1909.

Q You say that this first sample of the Kane apparatus

was made by other men under your direction? What men were those?

A The workmen in the shop in the magneto department.

Q Mechanics, that is?

A Mechanics, yes, sir.

Q Now, aside from Kane who made the drawing and turned it over to you and aside from you who either did the work or directed the work of mechanics did anybody else have anything to do so far as you are aware with the making of the original drawing, as you have identified it, or with the maintenance of the first sample equipment?

A No, sir.

Q What was the result of the test of this Kane equipment as installed on the engine and tried out at the Webster factory here on the fifth floor, in so far as it being a demonstration of the efficiency of the equipment was concerned?

Mr. Bulkley: I object to that as leading and suggestive.

A It was very successful.

Mr. Bulkley: And I ask that the answer of the witness be stricken out.

The Court: Read the question.

(Question and answer read.)

The Court: ~~It~~ may stand.

435 Mr. Williams: Q After the Webster Company, or the off-shoot, as you call it, which was first named the Hertz Electric Company, moved to Tiffin, Ohio, can you say how many equipments substantially like this first sample of the Kane equipment were manufactured and sold by the Webster Company?

A I could only make a guess at it, but I should say there were thousands of them.

Q How soon did you begin to manufacture them in quantities?

A Probably within two months after we moved to Tiffin.

A August or September, 1909.

Q When you started in to manufacture them commercially at that time, at what rate did you continue to manufacture them then? I don't mean exactly, but approximately.

A Oh, from 25 to 50 a day, I would say.

Q Did the quantities continue on at the same rate?

A We probably increased them. I am quite sure we did.

Q You remained in Tiffin, you say, four years?

A We remained four years, yes, sir.

Q What did you do then?

Statement of Evidence.

A We moved to Racine, Wisconsin.

Q Do you recall when that was?

A Five years ago, 1913. I am quite sure we moved to Racine in June, 1913.

Q Had the name of the company continued as the Hertz Electric Company all that time?

A No, sir.

Q What did it become?

A It became the Webster Electric Company.

Q When was that?

A Soon after we moved to Tiffin. We only had that for a few months.

Q The Hertz name?

436 A The Hertz name, yes, sir.
Mr. Williams: That is all.

Cross-Examination by Mr. Bulkley.

Q Did you say that Mr. Milton was your superior?

A My immediate superior, yes, sir.

Q The one to whom you reported and from whom you received instruction, is that right?

A Yes, sir.

Q You have not said anything about Mr. Milton in connection with the work that was done in connection with this magneto, have you?

A I have not.

Q Why not?

A Because at that time Mr. Milton's attention was occupied by something else, to the exclusion of everything else.

Q Absolutely to the exclusion of everything else?

A Absolutely to the exclusion of everything else.

Q You never told him a thing about this at all?

A Not a thing.

Q And he was your immediate superior in the company?

A He was my immediate superior in the company.

Q This was a very important matter, wasn't it?

A It was not as important as other things that we had in the fire at that time.

Q It was a very important matter, wasn't it?

A It was quite important, yes, sir.

Q And it was quite seriously important, wasn't it?

A Yes, sir.

Q Now, if you will be fair with me we won't take very long. Why was it so seriously important as you now say it was?

A It was seriously important because we were having trouble with it.

Q Did you know that the International Harvester Company had said that they did not want them any more, or something like that?

A Only by hearsay.

Q You knew it by hearsay?

A Yes.

Q Do you know whether Mr. Milton ever saw either one of those drawings, or not?

A I rather doubt whether he ever did.

Q You rather doubt it. Now, why do you rather doubt it?

A Because Mr. Milton was away a great part of the time.

Q He was away?

A Yes.

Q How frequently was he away from, say, January 1, 1909, until August 1, 1909?

A Very probably away half the time.

Q Where did he go; do you know?

A No, I don't.

Q He was away so frequently and so continuously that it is your thought and your opinion now that he did not have any opportunity to see those drawings?

A He may have had the opportunity, but I doubt whether he did, though.

Q I am asking for your reason, upon which you express your doubts that he saw them?

A I don't remember that he saw them.

Q But you say that you doubt that he saw them?

A I doubt it, yes, I do doubt it.

Q What is the reason for that doubt?

A Because my memory does not recall any time when I showed them to him.

Q Couldn't he have an opportunity to see those drawings without your having shown them to him?

A He might have had, yes.

Q Again I ask you why it is you doubt his having seen them.

A That drawing, if I remember rightly, was in my pos-

session about that time until the plug was manufactured. I hardly think it was out of my possession.

Q You are sure about that, are you?

A No, I am not sure; I am telling you my best recollection.

Q You are reasonably sure, are you?

A I am not reasonably sure at all. I am giving you my memory.

Q Is that your memory—

A That is my memory.

Q That it was continuously and all the time in your possession?

A Yes.

Q Which drawing?

A The yellow drawing here.

Q That is Exhibit 17?

A Whatever the exhibit is, the yellow drawing.

Mr. Williams: I think that is 18.

The Court: That is right.

Mr. Bulkley: I beg your pardon; 18. This No. 17, did you have possession of that one?

A I don't think I ever saw that one.

Q Now, this white one, was that in your possession all the time?

A I don't think I ever had that drawing. I don't believe I ever saw it.

Mr. Williams: What number is that?

439 Mr. Bulkley: This is Exhibit 17 now shown to the witness.

The Court: 17 in large figures.

Mr. Bulkley: Q. Now, what was the matter which exclusively occupied the attention of Mr. Milton?

A We were perfecting or getting up a high tension magneto for the automobile trade at that time, and that is what occupied his attention, and also mine a good share of the time.

Q During what period of time was that?

A How long did it take, you mean?

Q No, during what period of time was it?

A Oh, probably from the fall of 1908, until we moved down to Tiffin in 1909 in June. I would say it was longer than that. I would say we were at it nearly a year.

Q Did you hear Mr. E. J. Kane testify yesterday?

A I did.

Q Did you hear him tell something about the apparatus which Mr. Milton had asked him, Mr. Kane, to take up to Milwaukee?

A I can't recollect that. I can't hear all the testimony over there. There may have been quite a bit I missed.

Q You didn't hear that?

A I don't think I did. I don't remember that.

Q Do you know anything about Mr. Milton having instructed Mr. Kane to take the apparatus up to the experimental department at Milwaukee of the Harvester Company?

A I don't know anything about that.

Q Do you know of any attempts that were made by Mr. Milton or by the Webster Company to solve the difficulties in connection with the low tension magneto?

A Yes.

Q Did Mr. Milton have anything to do with that?

A Yes.

Q During what period was that?

440 A Some time previous to the time when Mr. Kane tried to solve it.

Q How long before that?

A Oh, probably three or four months.

Q Not after three or four months. Give the date, please. Fix it, not as to Mr. Kane having solved the difficulty, but the date.

A The dates back ten years are very indefinite to me.

Q You don't have any trouble in fixing it by Mr. Kane, what he did?

A I have Mr. Kane's drawing here. I said Mr. Kane's drawing was about all I could go by.

Q It was three or four months prior to that date?

A Three or four months prior to that date, yes, sir.

Q That would make it along in what month of the previous year?

A The last part of 1908.

Q Make it a little more definite than that, than the last part.

A I can't make it any more definite than that.

Q You would not want to say that Mr. Milton was not doing anything at all in the latter part of 1908 with refer-

ence to improving the low tension magneto, to take out of it the difficulties which were inherent in it?

A I would not like to say that he was, no, sir.

Q I asked you if you would state that he was not.

A I thought you asked me if I would like to say that he was not.

Q We will avoid that discussion. Will you say that in the latter part of 1908 Mr. Milton was not engaged in an endeavor to improve the low tension magneto?

A I will not.

441 Q But you know that he stopped any attempt to make improvements in the low tension and didn't make any improvements in the year 1909?

A I am quite sure there were no improvements made in the year 1909.

Q Was he making any attempts to make any improvements?

A I don't know what attempts he was making.

Q You don't know whether he was or not?

A No.

* * * * *
Q Did you ever talk with him about this improvement which you say Joe Kane got up?

A I don't recollect that I ever did.

Q Would not you have been likely to have talked with your superior about a matter of that grave consequence?

A I rather doubt whether I would.

Q Why not?

A Because I was allowed considerable discretion in my work. On lots of things I never consulted him at all, or even Mr. Webster. If I saw anything I thought would benefit the firm, why, I went to work and did it.

Q Who gave you those instructions; your superior, Mr. Milton?

A No, sir.

Q Where did you get those instructions?

A I didn't get them at all.

Q You did that of your own initiative?

A Yes, sir.

* * * * *
Q Did you have any high tension customers at that time at all?

A Not at that time, no. Later on we did.

Q How long after that?

A Oh, somewhere along probably in May.

442 Q What customer was it that you got in May, 1909, for high tension magnetos?

A The Cadillac Motor Company.

Q Did you sell them any high tension magnetos then?

A No, sir.

A We have a contract with the Cadillac people for a certain number of magnetos per year.

Q How many?

A I could not tell you from hearsay. It would not be evidence.

Q Go ahead. Nobody is objecting to it, Mr. Munn.

A 30,000.

Q 30,000?

A Yes, sir.

Q Conditioned upon what?

A I don't know the conditions of the contract. I never saw it.

Q They never bought the 30,000?

A No, they didn't.

Q They only had 12 of them?

A I don't know whether it was 12 or 6 or 3.

Q I thought you said 12 or 6.

A I don't say any number. They might have had a half a dozen.

Q Now, taking the term customer to mean some concern which regularly bought magnetos, which had been determined and decided as of practical value, did the Webster Company ever have any customers in the light of that definition for any high tension stuff whatever?

A I don't know what definition of the word "customer" you mean.

443 Q I told you. I thought I told you to consider the definition which I gave, or the explanation of what I meant by customers.

A We have never sold the Cadillac people any magnetos.

Q Of anybody else?

A Any high tension magnetos?

Q High tension magnetos.

A Up to that time we hadn't or up to there.

Q Or any time.

A We have sold the high tension magnetos since.

Q Since when?

A Since this question came up. You are speaking of 1909, are you not?

Q Yes.

A Since 1909, or 1910, we have sold high tension magnetos,—a great many of them.

JAMES A. MUNN, resumed the stand for plaintiff, and further testified as follows:

Redirect Examination by Mr. Williams.

Q Mr. Munn, you were asked by Mr. Bulkley relative to the Milton high tension machine, and the Cadillac contract. Won't you tell all that you know about that matter, particularly in so far as its engaging the attention of Mr. Milton and Mr. T. K. Webster is concerned?

A We began the construction of that type of magneto quite some earlier than this trouble we had with the Harvester low tension magneto, and even while Mr. Milton was away in Europe I had worked on it myself, and when he came back we devoted a great deal of time to it, and as it got toward the last end, toward the completion of the magneto, he and I both devoted almost all of our time to it. I did have a little time to devote to the low tension, and he, I don't
445 think, had any time; and we finally finished it up,—oh, I would say somewhere along about May. And Mr. Webster, as I understand,—

Mr. Bulkley: Q What year?

The Court: 1909. What year?

A 1909, yes sir. And Mr. Webster, I understand, got a contract from the Cadillac people, from a sample that he took over, that I had made, of this high tension magneto, and made a contract with them to furnish 30,000 a year of them, and we immediately went down to Tiffin and leased a building and put in machinery, and started to manufacture that machine; but as a matter of fact we never did manufacture more than a very few of them, because we failed on it,—we lost our contract.

The Court: The fact of it is, the magneto did not work properly?

A The magneto did not work properly, did not give satisfaction.

Mr. Williams: Q What in a general way is the difference between a high tension machine and what you have referred to as a low tension machine, or between the high tension machines which we have been discussing here?

A There was very little difference in the construction of the frame of the magneto itself, but it carried a make-and-break apparatus, for making and breaking the primary current, on the face of the magneto, and an outside secondary coil for producing a jump spark, in place of a make-and-break spark, which is done mechanically in the cylinder; the high tension magneto produces what they call a jump spark, a very high voltage, across the spark points,—also in the cylinder of the engine.

Q In the high tension system are there any mechanically moving parts in or associated with the plug at all?

A No, sir.

Q Now, you say that you saw Milton during this period, say from January to June, 1909, practically every day, and that he was at the factory of the Webster people; in what connection did you see him? That is, what was the occasion of your seeing him thus frequently?

A Consultations on this high tension magneto.

Q What were you doing with it?

A I was developing it.

Q Building it?

A Personally, yes, sir.

Q What, during that period, did Milton say about the high tension machine, that would indicate the extent to which he was interested in it, to the exclusion practically, as I think you said, of other matters? In other words, what was it that led you to say that he was devoting his time practically exclusively to that high tension machine, in so far as it came to your attention?

A The fact that he, whenever we were together, talked of almost nothing else. The low tension magneto at that time was hardly mentioned. In fact, I believe as a matter of fact that Mr. Webster had almost given up the low tension magneto, to give his whole attention to this high tension magneto.

Q Do you know anything about the number of low tension machines which the Webster Company had been selling prior to June, 1909, as compared with the figure 30,000 per year

which I think you said was the amount of the Cadillac contract which was eventually entered into?

A I think we might have been manufacturing, after this Kane plug was gotten out,—

Q No, no; I am asking you particularly about the time before that.

A Before that?

Q That is, when you were selling the old Milton low 447 tension machine, on the order of this Plaintiff's Exhibit No. 11; how did the number of those machines sold by the company compare with the figure 30,000 per year?

A I would say we were making perhaps twenty a day, of those styles of magneto; I hardly think more.

Q Did you see Mr. T. K. Webster frequently during this period in 1909? Before you moved to Tiffin?

A Just previous to that I think I saw him quite considerably, yes.

Q Did you talk with him or he with you in such a way as to enable you to say whether his interest apparently was in high tension or in the low tension machines?

Mr. Peaks: I object.

The Court: Milton?

Mr. Williams: No. Mr. Webster, Mr. T. K. Webster.

The Court: You asked him if he talked with him? He may answer that.

A Yes, I did.

Mr. Williams: Q Now, what was his talk with you relative to the high tension machine?

A Very flowery. He had every hope of success on it.

(Objection by defendants' counsel and motion to strike out the answer as not responsive. Objection sustained.)

The Court: Give us the substance of what was said.

A The substance of his conversation was that he considered the thing a great success, and that it would be a success.

Mr. Williams: Q Did he talk figures at all?

A How is that?

Q Did he talk figures at all, dollars, or machines?

A No. Only the size of the contract; that is all.

Q What did he say about that?

448 A He said he had a contract for 30,000 machines.

Q Did he talk about the amount of money involved?

A No, he did not say anything about that. I did not know what they were getting for the machines, at all.

Recross Examination by Mr. Peaks.

Q Mr. Kane spoke of his having been under the direction, or turned over by Mr. Milton, I understod him to say, to a Mr. Adam Munn. This witness has said his name is James A. Munn. Are you referred to sometimes as "Adam" Munn?

A No. I do not think Adam entered into the conversation at all. My name is James Abbott—James Abbott Munn. They generally call me Abbott Munn.

Q Were you the only Munn that was employed about the plant at that time?

A Yes, sir.

Thereupon plaintiff's counsel offered in evidence as Plaintiff's Exhibit No. 19 the pages of the memorandum book to which Mr. Maurice Kane had referred, and containing the memoranda which he read in connection with his testimony.

Objected to by defendants' counsel—objection overruled, but ordered that the entire memorandum book go in as a physical exhibit

ERNEST BRUCE, a witness called on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 42, residence Racine, Wisconsin; superintendent Webster Electric Company. Has been connected with the company since February, 1909. When he went to work for it, it was known as the Webster Manufacturing Company, then as the Hertz Electric Company, and later as the Webster Electric Company.

449 Witness had charge of the manufacture of the magneto ignition apparatus which the Webster Manufacturing Company was manufacturing and selling at the time he began work for it. It was a machine known as the square bar machine, square machine; had straight magnet bars; had what they called three pole pieces, and two big coils, one on each side, and inductor, and shaft; and part of a bracket which the company furnished at that time that held the springs, also push finger.

Witness was shown the pamphlet marked Plaintiff's Exhibit No. 13, and testified that the magneto shown in the cuts

in said pamphlet was the one which the company was making when he began work for it. The Company continued the manufacture of this type of magneto until about August, 1909. The company then began to manufacture a round machine, a machine that was called the "F" type, that had round pole pieces. Webster Company was located in Chicago at 15th and Western Avenue when witness began work for it in February, 1909. Moved to Tiffin, Ohio in October 1909, being one of the last of Webster employees to go. The manufacture of the "F" type of machine had been commenced in Chicago before witness moved to Tiffin. The first order was for 1000 machines. Made about 40 a day. Continued to make the type "F" machine after witness moved to Tiffin. Made them for a year or two afterwards. He could not state the exact number made but it might have been about 8,000 or 10,000.

Describing the type "F" machine made before the company moved to Tiffin in the fall of 1909, the witness said:

"A Well, it had round pole pieces, round poles; it had straight bars; it had three pole pieces there; and the coils were mounted on the middle pole piece. We made the inductor, shaft and the push finger and the springs; but in this type "F" there were two studs that held the springs, and the pole pieces, themselves."

Witness saw one of the entire equipment on an engine at the old Webster place at 15th and Western Avenue a couple of months after he went to work there in February, 1909. Saw it in operation there and the engine ran fine. That was about all he knew about it.

Being shown the cuts Nos. 4, 5 and 6 in pamphlet marked Plaintiff's Exhibit No. 16, witness said:

"This is the type machine that was made after that, this other one, No. 13; this was after that one, made after that 450 one, this type of magneto."

Witness further stated that the illustrations numbered 4, 5 and 6 in the pamphlet Exhibit No. 16 represented the same type of machine that was manufactured at the rate of 40 or 50 per day before the Webster Company moved to Tiffin.

Witness knew Mr. E. J. Kane. First met him about the middle or latter part of February, 1909, on the fifth floor of the Webster Company's place, understood he was a salesmen—also saw him doing drafting. Witness also knew Mr. John L. Milton. Made his acquaintance at the Webster Manufacturing Company about 1906. He was in or about the Web-

ster plant in 1909 before the move to Tiffin. Had a desk in the main office on the first floor.

Witness also knew Mr. Abbott Munn. He was connected with the Webster Company in the spring of 1909 before the move to Tiffin, and was located on the fifth floor of the Webster Company.

No cross-examination.

ARTHUR C. KLECKNER, a witness called on behalf of the plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 28, residence, Racine, Wisconsin, chief engineer Webster Electric Company. Connected with the company since August, 1909. Company located at Tiffin, Ohio when he began to work for it. Said company moved to Tiffin in the early part of the summer of 1909 and had not entirely completed its moving when witness entered its employ. Company was then engaged in preparations for the manufacture of a high tension magneto for the Cadillac Motor Company and was making parts to fill that contract. That continued until the early part of the fall of the following year, 1910. In September or October, 1909 the rest of the equipment was moved to Tiffin and the manufacture of the type "F" low tension magneto was undertaken at the Tiffin plant. The type "F"

magneto was a straight bar magnet magneto, having two 451 tripolar pole pieces having curved ends. The equipment furnished included the magneto proper, the inductor, spring arm, push finger, and springs. These parts were furnished by the Webster Company. Then there was the igniter plug, which supported the magneto, the push rod, and operating mechanism, furnished by the International Harvester Company. There were several thousand of these equipments sold.

The manufacture of the high tension magneto was entirely abandoned, because, outside of the first half dozen or so samples that were furnished, they were not satisfactory. Even those did not operate satisfactorily and no more were built.

Being shown the pamphlet marked Plaintiff's Exhibit No. 16, and asked to state how the apparatus there shown compared with the type "F" apparatus which witness had stated

was manufactured and sold to the extent of several thousand during the years 1909 and 1910, witness said:

"This illustrates the type "F" magneto of which I have spoken".

Witness was acquainted with Mr. John L. Milton. First met him at the factory of the Webster Electric Company at Tiffin, Ohio, probably in September of 1909,—the latter part of August or in September. Mr. Milton was at that time engaged in an attempt to perfect the high tension magneto, which the company was trying to build for the Cadillac Motor Company. Witness did not see Milton every day, the days that he did see him, only for a short time. Mr. Milton had a room at the front part of the second floor, and as a rule that room was kept locked, but witness occasionally went in and was more or less familiar with the work he was doing. Mr. Milton was at that time testing and manufacturing the experimental coils for use with the high tension magneto.

Mr. T. K. Webster, Jr. was in charge of the plant at Tiffin when witness went to work there in August 1909.

Witness was acquainted with Mr. E. J. Kane. First met him at the Webster Electric Company in Tiffin, the latter 452 part of the year 1909, sometime between September and November. Did not see him very often. Witness thinks that on several occasions Kane went over with witness and others (us) the details connected with the perfection and manufacture of the type "F" magneto, and conducted some experiments on the proper design of the springs to secure proper action from the magneto; he also went out in the territory to handle any difficulties which might arise in connection with the installation or use of the magneto.

No cross-examination.

—TOWNER K. WEBSTER, called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 69, residence, Evanston, Illinois; occupation, manufacturer. President of Webster Electric Company, also president of the Amalgamated Machinery Corporation of Chicago. Connected with Webster Electric Company since date of incorporation. Incorporated it. First called the Hertz. Was also connected with the Webster Manufacturing Com-

pany for about 35 years; was president of that corporation. The business of the Webster Manufacturing Company after 1900 was chiefly the manufacture of grain elevator and conveying machinery; also the manufacture of gas engines. Witness became interested in the manufacture of magneto ignition equipment for gasoline engines. Being asked to state when and under what circumstances that was, the witness said:

"I cannot give you the exact dates. I know the circumstances. We were making a gas engine, and our New York manager called my attention to a magneto that was used—had been used—on a well drilling machine, with apparently great satisfaction. I became interested enough in it to acquire the rights, and we commenced to manufacture the large square machine."

453 That was a different machine from any that has been referred to in the testimony.

Witness is acquainted with John L. Milton. Asked to state when and under what circumstances he made his acquaintance, witness said:

"I cannot give you the dates, but after we had acquired this first machine, Mr. Milton came in to our office and stated that he did not see any way of getting around the patents that we had acquired, and he would like to come in with us."

Witness further testified regarding Mr. Milton, as follows:

"Q. Did Milton become associated with the Webster Manufacturing Company as the result of this interview with him?

A Yes, sir.

Q What did he do then?

A He began the development of this magneto, improving it.

Q Did his work result in the manufacture by the Webster Manufacturing Company of a so-called Milton magneto?

A Yes, sir.

Q Were those sold by the Webster Company?

A Yes, sir.

Q To whom, first?

A Why, the first large customer, and possibly the first customer, was the Harvester people.

Q International Harvester Company?

A International Harvester people.

Q Can you describe briefly the first form of Milton machine, as sold to the Harvester Company?

A Why, I am not a technical man; no, sir, I do not think I can describe it. I can possibly paint a picture of it. It was a square machine, and quite large,—square magnets.

454 Q Can you state when or approximately when you first began to sell that original Milton machine to the International Harvester Company?

A Why, I cannot give you any definite date. I should say in 1906 or 1907, or somewhere along there.

Q Was that a successful machine, so that you continued—

A No, sir.

Q —indefinitely, to manufacture and sell it?

A No, sir.

Q What can you say as to its being unsatisfactory? What was the fact in that regard?

A Well, the whole magneto business was in a flux at that time; they were using batteries, and yet they wanted magnetos; and it was a progressing upwards; everybody was trying to build something better, and we kept at it, and the only reason why we got the business of the Harvester for a time was it was probably the best machine on the market at the time.

Q You say that it was not, however, satisfactory. How was that matter brought to your attention?

A Well, I was in quite close touch with the Harvester people, very naturally, because we wanted that business; it was nearly the whole of our business; and there came a time when they were having so much trouble that we had to improve it.

Q When you say the whole of your business, do you mean the whole of the business of every character—

A Oh, no.

Q —in which the Webster Manufacturing Company was engaged?

A No, sir, no, sir.

Q Just what did you mean?

A Simply the business of making magnetos.

455 Q The whole of the magneto business, then?

A Yes, sir.

Q How critical did the unsatisfactory character of this original magneto machine become, in so far as the Harvester Company's business was concerned?

A I became satisfied that we had either got to improve it, or lose the business.

Q How did you become satisfied of that?

A Well, through the information that came to me from the Harvester Company either by letter or conversation.

Q I show you a paper dated March 15, 1909, purporting to be a letter signed by H. A. Waterman, and marked as Plaintiff's Exhibit No. 1, and will ask you whether you can identify that as something which you saw at or about that date.

A I do not remember seeing this letter, no, sir.

Q Are you familiar with the substance of this letter? Have you read it over?

A Yes, I have.

Q Have you read it over today, or quite recently?

A Yes.

Q Was the substance of the report as to the unsatisfactory character of the Milton machine, and the purpose of the Harvester Company to discontinue its use, brought to your attention at or about the date of this letter?

A Yes, sir. I think so.

Q I now call your attention to another paper, this purporting to be a letter on the letterhead of Webster Manufacturing Company, and addressed to International Harvester Company, Chicago, and signed, if I read the signature correctly, 'T. K. Webster, Pres.' Can you identify that document?

A This letter was written by me, yes, sir.

Q When?

456 A The date here is April 29, 1909.

Q Now, this letter which you have just identified reads, in part: 'I enclose herewith photographs of the Harvester 6-H. P. engine with the latest attachment, which we are sure will suit all interested in this proposition. As already stated we have covered all the points of objection very properly registered by Mr. H. A. Waterman.' Can you tell us what photograph was enclosed with that letter, or what was shown in the photograph thus enclosed or attached?

A I suppose it was a photograph. I do not know what it was.

Q I show you a photograph marked in this case as Plaintiff's Exhibit No. 5, and ask you whether you can identify either the photograph or compare what is shown in the photograph.

A This looks like the improved machine, as we made it for the Harvester, after their criticism.

Q Now, when was it that you first saw a machine of that

improved form, and as shown in this photograph, Plaintiff's Exhibit No. 51

A I suppose it was in March, 1909.

Q Where did you first see a machine of that character?

A Do you mean the whole thing attached to a gas engine, or—

Q Yes, I mean that magneto equipment, substantially as shown in that photograph, and attached to a gas engine.

A The first one, I think, that I saw, was when the Harvester Company sent an engine down to our works, and we had it put onto the 6-horse power engine there.

Q You say it in operation, did you?

A Yes, sir.

Q On that engine, at that time?

A Yes, sir.

Q What, if any, steps did you take following your having seen that magneto equipment in operation on that engine at your factory toward bringing the new equipment to the attention of the International Harvester Company, or its officers or employees?

A Why, I got Mr. Cavanaugh, the active man in the Experimental Department, to come over with Mr. Kane, and see it in operation.

Q And he came?

A Yes, sir.

Q And saw it?

A Yes, sir.

Q Was that Mr. Maurice Kane?

A Mr. Maurice Kane.

Q Now, what following that did you do or direct to be done in interesting the International people in this new equipment?

A We commenced the manufacture. I gave orders to manufacture it right away.

Q Was there any further submission of it to the International people after Mr. Cavanaugh came and saw it in operation at your plant?

A Was there any what?

Q Was there any further submission of this equipment to the consideration of the Harvester Company, in any way?

A I remember Mr. Cavanaugh saying that they would want fifty a day. It quite impressed me, because I thought that was quite a sizable order at that time; and we followed it up, as we would follow up any enterprise of that kind. I kept going to Milwaukee, and watching it, together with the engineers, in the usual course.

Q Can you describe or state what equipment is referred to in this letter of yours dated April 29, 1909, to the International Harvester Company, in which you refer to an enclosed photograph of the Harvester 6-horse power engine, and in which you say that you have covered all the points of objection very properly registered by Mr. H. A. Waterman, and then go on to describe the machine, saying, first, 'As regards the rigidity we have attached the magneto now by two 5/8-inch bolts, and so on; 'We are sure you will be satisfied on the point of rigidity. Second, we control this with the exhaust rod, so you only spark when there is charge in the cylinder. Third, we have made the magneto smaller; so that we believe now that you have got exactly what we have all been working for'. The question is, what machine was referred to in that letter of April 29, 1909.

A It was the machine referred to in this photograph.

Q This photograph you have in your hand?

A Yes, sir.

Q And marked Plaintiff's Exhibit No. 5?

A Yes, sir.

Q This letter that I just called to your attention, your letter of April 29, 1909, is marked Plaintiff's Exhibit No. 2, is it not?

A Yes, sir.

Q Will you look now at this pamphlet marked Plaintiff's Exhibit No. 13, and state whether you recognize the equipment shown in the cut forming a part of that pamphlet?

A Yes, I recognize this.

Q What magneto is that? What is that?

A It is a magneto attached to an engine.

Q What magneto is that?

A One of the earlier types. I think it was a Milton magneto.

Q You mean by that the Milton magneto manufactured by the Webster Company?

A Yes. One of the earliest types.

Q And that is the one that was found to be unsatisfactory to an extent such that your business in it was going to be lost?

459 A Yes, sir.

Q Apparently?

A Yes, sir.

Q Now, when you learned of the complaints and objections and practically the decision of the Harvester people

not to use this equipment further, what did you do about the matter?

A Why, I remember calling both Mr. Kane and Mr. Chiville, and saying, 'Here'—

Mr. Bulkley: Which Mr. Kane?

A Mr. Joe Kane and Mr. Chiville. And if I remember right I offered them a prize for the man that would get up the best design for this improvement.

Mr. Williams: Q What did you say?

A That is what I said. Do you want me to repeat my language, as near as I can?

Q Why, the substance of it, if you do not remember the exact words. Did you say anything to them, for example, about the troubles, or about loss of business, or anything relating to the subject? If so, what did you say, as nearly as you can remember?

A Well, I do not pretend to remember a conversation back nine years, but I know this: I may have said to them, 'We are in trouble here with this, and we have got to do something'. I presume possibly I did. But I remember distinctly saying: 'Why, bring down a new design here;' I offer a prize for a new design, to these two men.

Q Now, did you do anything, so far as you know, toward endeavoring to get up a machine?

A Yes.

Q —which would overcome the difficulties?

A Yes. They brought the design down, if I remember rightly, very quickly. I imagine it was on a Monday. Of course I am not sure about the date; but it was very
460 soon after this, any way, they both brought in a design, Mr. Chiville and Mr. Kane.

Q In what form were those designs?

A Well, I do not remember.

Q I mean, did they bring apparatus?

A Oh, no.

Q Or drawings, or—

A Not apparatus. Of course it must have been drawings. I do not remember. But I do remember distinctly that we decided—I say 'we'—I suppose I put it up to our engineers, as I always did, in that kind of a case; and Mr. Kane's design was accepted as much the better. Mr. Chiville himself said it was much the best.

Q Now, how did that design, as thus submitted by Mr. Kane, compare with the apparatus shown in this photograph,

Plaintiff's Exhibit No. 5, which you say was installed on an engine at the Webster factory and tested?

A I think that perhaps it was just the same.

Q Will you look at this drawing, marked Plaintiff's Exhibit No. 18, and state whether you can recognize and identify it?

A I do not remember anything about the drawing.

Q Will you look now at the illustrations, numbers 4, 5 and 6, of this pamphlet marked Plaintiff's Exhibit No. 16, and state whether you recognize the apparatus there illustrated, and, if so, say what it is?

A This appears to be (indicating Exhibit shown witness) a picture, and an instruction sheet regarding the improved type of Webster magneto, which we sold the Harvester after the other style was condemned.

Q How does the apparatus shown in the cuts of that pamphlet compare with the apparatus which was first tested, as you have said, on the engine at the Webster Manufacturing Company's factory, and as shown in the photograph, Exhibit 5?

A I think it is the same machine.

461 Q I call your attention now to a letter on the letter-head of the Webster Manufacturing Company, dated June 3, 1909, signed 'Webster Manufacturing Company, T. K. Webster', and marked Plaintiff's Exhibit No. 7, and ask you whether you recognize and can identify that?

A Yes; I think this letter was dictated by me, yes, sir.

Q Is that your own personal signature?

A No, that is not my signature. It was probably left for someone to sign, but I remember the incident.

Q What was the incident that you recollect, as you say?

A Well, that they were wanting magnetos on those larger engines, and that we had Kane go over there and take the measurements.

Q This letter reads: 'Mr. Joe Kane'—it is addressed to W. A. Cavanaugh, Harvester Building, City.
'Dear Mr. Cavanaugh:

Mr. Joe Kane went over to the Deering Works and took the measurements for the 15-horse power engine, and we have completed the drawings. We will be able to put the magneto on nicely and yet not interfere at all with the change speed device. We will proceed at once to get out the patterns, and rush the work as rapidly as possible.'

What is this Deering Works that is referred to there?

A The Deering Works of the Harvester Company, in Chicago.

Q That is, of the International Harvester Company?

A International Harvester Company, yes, sir.

Q And part of the plant with which, or the organization with which, this Mr. Cavanaugh was connected?

A Yes, sir.

Q Now, what form of magneto was it of which you wrote that the measurements had been completed, and the drawings made, and so on, at that time?

462 A We were only making one type of magneto. That was this type.

Q Let me ask you to describe, in your own way, the construction of that magneto, which you say was proposed by Kane, and then tested on the engine at your plant. Will you describe that machine, that is, the machine illustrated in this photograph, Exhibit 5, which you say corresponds with the machine as tested on the engine at your plant.

A It is extremely difficult for a man who is not a mechanic—

A I can say this, and perhaps it will answer your question: It was extremely vital to the interests of the Webster Manufacturing Company that we make good on this magneto. Now, on the practical side, one of the great difficulties was the attachment. I was in close touch with Mr. Cavanaugh, of the Experimental Department, and I knew what these difficulties were. It was solving a problem that was troubling the whole country, because you get a magneto on a farm engine, and it won't work, and there is trouble right off; and I kept in touch with the trouble, by sending this man Kane out, you know, through the country, and I was continually in touch with that. Now the thing that impressed me about this whole business was that we had got to attach it in a substantial manner. The next thing was, we had got to make it smaller; it was too big. And this machine that was produced by Mr. Kane met the requirements. Now, all that I know in connection with any of the business is the results. The details I am not familiar with.

Q Now, what was the result?

A The result was that we got the business.

Q And then what? Did you keep it.

A Yes, we kept it. Of course we had to keep on improving, but we kept it.

463

Cross-Examination by Mr. Bulkley.

Q Mr. Webster, you testified, did you not, in the interference proceeding between a patent of Mr. Milton and an application of Mr. Kane's?

A I do not know that I did.

Q You do not know?

A No, sir.

Q Don't you know that you testified in an interference case?

A No, sir.

Q In connection with this matter?

A No, sir.

Q Well, let me try and refresh your recollection. Don't you remember that in November of the year 1916 you went to Mr. Williams' office to testify in some case?

A I do not remember it.

Q Now, Mr. Webster, to refresh your recollection a little further, let me show you what appears to be a printed record in behalf of Kane, in an interference between Edmund Joseph Kane, against John L. Milton. Now, just glance that over, and see if you do not find your memory so far refreshed as to be able to tell us that you testified in that case?

(Record shown witness.)

A Well, if I did testify, and it is printed, it is possible I did. I do not remember it, sir, though. (Examining record.) Is my testimony here, Mr. Bulkley?

Q I thought I handed it to you, Mr. Webster.

A I do not see anything here.

Q Perhaps I did not give you the right place. I perhaps did not give you the right place (indicating in record.)
464 Is my testimony here, Mr. Bulkley?

Q I thought I handed it to you, Mr. Webster.

A I do not see anything here.

Q Perhaps I did not give you the right place. I perhaps did not give you the right place (indicating in record).

A Well, this looks very much as if somebody took my testi-

mony. I haven't any recollection of it, however. Mr. McCaleb ought to know, if he is here.

Q Well, don't you remember, Mr. Webster, of—

A I haven't the slightest recollection of giving that testimony.

Q Is that so?

A I do not know why, but it is extraordinary. In 1916, that was?

Q In November, 1916.

A Can't Mr. McCaleb refresh my memory in some way about it? I do not remember.

Q Don't you remember of having gone over there to Mr. Williams' office in connection with this matter of controversy between Kane and Milton?

A No, I do not.

Q And talking with Mr. Williams about it?

A I do not, at all.

Q At any time?

A No, I do not remember it.

Q Well, when did you have your attention directed to this—

A What?

Q When did you have your attention directed to this matter of Kane's invention after 1909?

A Well, I remember, at some meeting, of Mr. Maurice Rosenwald and Mr. Brown, their calling our attention to the fact that we had got to buy this patent. That is about the first I heard of it.

465 Q What patent?

A The Kane patent.

Q Prior to that time hadn't you heard anything, hadn't it been called to your attention between 1909 and—

A I do not remember it.

Q —and that date?

A I do not remember it.

Q Did you ever have any negotiations with Mr. Milton with reference to the purchase of the patent, or application, patent rights?

A Yes, oh, yes.

Q Well, when was that?

A Oh, a series of years, yes.

Q Commencing when?

A Oh, I should think commencing with 1906, perhaps.

Q Do you remember having entered into a sort of a trust agreement?

A What is that.

Q A sort of a trust agreement, in which Mr. Williams was made a trustee?

A Yes, I think there was something of that sort at one time, between Mr. Teagle's—I think so.

Q Do you know anything about what patents were included in that trust agreement?

A No, sir.

Q Do not remember anything about what patents were included with and embodied in that agreement?

A No, sir. That is, when you say that, do you want me to give their numbers, or what they cover, or anything?

Q No.

A No.

466 Q Of course not.

A I could not describe them.

Q I am asking you to state generally.

A I cannot state generally.

Q In any descriptive way that is possible.

A I cannot state.

Q What those patents were about, or what they related to.

A No, I cannot do it.

Q Do you remember having any talk with Mr. Milton, or writing him any letters about taking out patents?

A I presume I wrote him letters, and talked with him quite a number of times.

Q Do you remember anything about it, now?

A I do not.

Q Anything specifically about it, in one way or the other?

A I do not.

Q Mr. Webster, do you remember seeing a patent which had a machine,—descriptive and illustrative of a machine something like that, shown in this patent that I now hand you, at any time?

(Patent shown witness.)

Mr. Williams: Will you make the record show the number of that?

Mr. Bulkley: Q. Will you read that, Mr. Webster, the number on that? Or I will.

A The patent office number is 1,096,048.

Mr. Bulkley: 1,096,048.

A Mr. Bulkley, I do not want to seem not to answer your

questions, but this is my plan of business. I hire a patent lawyer, and I turn over everything to him, and I do what he says; now, I do not pay any attention; I cannot say whether I ever saw this patent or not.

Q Well, with whom did you advise?

467 A I advised with Mr. Williams, for one; and formerly I advised with Mr. Linthicum.

Q Now, with whom did you advise at the time when you entered into this trust agreement, in which Mr. Williams was made trustee, and in which you agreed to pay Mr. Milton a considerable sum of money for certain patents? With whom did you advise in connection with that transaction?

A When we paid him \$25,000? Is that the time that you refer to?

A A large sum of money, yes.

A Why, Mr. B. V. Becker was my personal attorney, in all my matters; and Mr. Williams was at that time my patent attorney, and the patent attorney of our company.

Q What did you understand were the inventions which were to pay that large amount of money for?

A My experience with patents has always been, Mr. Bulkley, that we have paid the money, and the inventor got the cash; and that is just the case with this, up to this time. Now, I paid no attention to the thing. Mr. Becker, as my adviser, contrary to my business judgment, said we had better pay it and get rid of the thing; and I said, 'All right, I will accept your advice'.

Q Twenty-five thousand dollars?

A Yes, sir.

Q You proposed to pay \$25,000 for certain patents that you did not know anything about?

A Exactly so.

Q Is that it?

A Yes, sir.

Q Exactly?

A Yes, sir.

Q Don't you remember of ever having any conversation, talks, with Mr. Milton, or letters which you wrote to him, relative to taking out a patent on this very thing?

A I do not.

Q Which solved the difficulty—

A I do not.

Q —in connection with these Harvester objections?

A I do not. If that date is right, if that is in 1914, though I am not quite sure of my dates, there was quite a time when the relations between Mr. Milton and myself were greatly strained, and I only had dealings with him practically through my attorney.

Q Now, when was that?

A Well, I say, if you have got any letters, I think I can give you somewhere around the dates. From 1910, along there for some little time.

Q For how long a time?

A How long a time?

Q Yes.

A I cannot give you dates.

Q I am not asking you for exact dates.

A It may have been one year, or two years or three years.

Q And you cannot tell any closer than that?

A Not much closer, no. There was a time when we took back Mr. Milton, and then we separated again.

Q When did you take him back? About when was that?

A That must have been about—Mr. Milton got back from Europe, I imagine, in 1911; and I should think in 1912, probably, we took him back, for a while.

Q Did you have anything to do with his going to Europe? Did he go there on a business for you?

A I am very sorry I did not have anything to do with it.

Q He did not go there on your behalf?

A No, sir.

469 Q Or on behalf of the Company?

A He did not.

Q In any respect?

A He ran away. And went there, left me right in the hole, in the worst kind of a hole.

Q Now, when did he come back, do you remember?

A Well, I should say it was about 1911 or 1912; probably 1911.

Q You remember that, don't you, quite clearly?

A Well, it must have been about that.

Q That it was about 1911 or '12?

A Yes, I think so.

Q Don't you know he got back as early as October of 1910?

A No, I do not know it.

Q You won't say that he did not?

A No, no, I won't say he did not.

Q Did he apply to you for a position, or restoration with the Company, when he got back from Europe?

A Some time after he got back, what date I cannot say, he brought to me another world beater, and we fell for it. That is the fact. He thought that we would get back some of our money. It was again a mistake.

Q How do you know it was a mistake, Mr. Webster?

A How do you know any mistake? When you—It failed, and did not make any money, and we had to abandon it. That is all.

Q Well, what patent are you talking about?

A I cannot tell you. I will describe the thing to you.

Q All right. Describe it.

A Well, it was a little coil that he put onto the spark plug of an engine; and he had us all buffaloed; we went down to the patent office, all our attorneys; I went, and took an order for about—I thought I had made six hundred thousand dollars on the thing; and then it failed.

470 Q Now, you know enough about what occurred at that time, that it was this coil in connection with this machine?

A With which machine?

Q What you are talking about. The machine you are talking about.

A What machine are you talking about?

Q I don't know.

A Then I don't know.

Q Very well. You say you were buffaloed?

A Yes.

Q And deceived, by him?

A No I do not. I think he deceived himself, and he deceived us.

Q In connection with this coil?

A A little coil, that went on the spark plug of an automobile. It looked like a great invention. Even as great a man as Mr. Williams was fooled by it.

Q What was that coil? What did he tell you that coil was going to do? Do you remember that?

A What?

Q What did he tell you that coil was going to do?

A It was going to revolutionize the automobile spark plug business.

Q Well, in what respect? Do you remember anything about that?

A Why, my memory is fairly good about the general circumstances.

Q Oh!

A Yes.

Q As late as nineteen hundred and what? When was that? About when?

A I say I do not pretend to give you dates.

Q About when? Don't you have any recollection at all?

A Well, in about 1911 or 1912.

471 Q. When Mr. Milton came back from Europe, which you say may have been as early as October of 1910, what did he do?

A I do not know what he did.

Q Don't you know anything about it at all?

A No.

Q Did you have anything to do with taking him back with the company?

A Not that I know of. My recollection is that he brought us this little coil.

Q The first thing, when he got back from Europe?

A I do not know whether it was the first thing or not.

Q. Don't you know whether you had anything to do with taking him back in your company again when he returned back from Europe?

A Now, Mr. Bulkley, I have told you my first recollection is his coming back and presenting this coil, this little coil that went onto the spark plug of an automobile. Now, that is a distinct recollection, because that was the opening wedge of what we thought might be another arrangement with Milton.

Q Another arrangement with him? When was the other? Was there any other arrangement with Mr. Milton?

A I should say there was.

Q When was the arrangement made with him after he got back from Europe? About when?

A I am talking about Mr. Milton had an original arrangement with me and with our company.

Q Before he went to Europe?

A Yes, sir.

Q Yes, and you say he ran away?

A Yes.

Q And left you in the lurch?

A Do you want to know about it?

A No.

472 A Well, if you do, that will illuminate the thing. If you do not, why—

Q Now, when did you make another arrangement with him, after his return from Europe?

A Why, we tried to make an arrangement on this little coil that went on the spark plug.

Q And is that all you tried to do with him?

A Until, I think, he got his twenty-five thousand dollars. That is my next—

Q And that is all of his connection with the company—

A Yes.

Q —up to the time that he got his \$25,000.—

A That is my recollection.

Q Wait one moment.

A That is my recollection.

Q Between the time—Now, wait one moment, if you please.

A Yes.

Q Between the time that he came back to you, and had this coil, up to the time when he got this \$25,000, all that you know about his having done anything is in connection with this coil; is that right?

A That is all that registers in my mind, yes, sir.

Q You are pretty sure about that, aren't you?

A Why, I do not claim to be sure about anything. But you ought to wait a minute.

Q I thought you said you were through.

A You are trying to get the things that register in my mind, aren't you?

Q Yes.

A Is that what you are trying to get?

Q I am trying to get what you remember.

A Well, that is it.

473 Q And I am trying to show what you do not remember.

A There are a lot of things I don't remember, I presume, but I do not remember, from the time that he brought that coil until we made the arrangement to pay him \$25,000, I don't remember any thing about my connection with Mr. Milton. There may have been—

Q And you do not remember that during that interval between the time of his return from Europe and when you paid him \$25,000, of his ever having done anything, for and in behalf of your company, except in connection with that coil?

A That is all I remember.

Q Wasn't he chief engineer of that company?

A Why, no, he was not chief engineer of the company, after he went to Europe.

Q He was not chief engineer after he got home?

A No; just experimenting on that coil, as far as I know, that I can remember.

Q Don't you know that you sent him all over the country, Mr. Webster, to refresh your recollection, on this trip and that trip, in connection with very many and divers matters, other than this coil?

A No, sir.

Q You don't remember anything about that at all?

A No.

Q How?

A No, sir.

Q Now, what was his connection with that company before he went to Europe?

A He was in charge of this high tension magneto.

Q Is that all?

A Well, practically all. He was developing this magneto; but when we struck this big thing, as we supposed, in the high tension, why, that was so big a thing and so promising
474 that he gave practically his entire attention to it.

Q You know that, now, and you remember it, do you?

A I remember it. Certainly I do.

Q And you are pretty definitely clear in your mind about it?

A Yes, sir.

Q Are you?

A Yes, sir.

Q That he did not have anything to do with the other department of work of the company, as you now quite clearly remember, except in the development of this high tension magneto; is that right?

A Now, listen.

Q Now, just answer the question, please.

A Now, listen. This is what I say: I say that he commenced the development of the low tension magneto, and he was the chief man in that, until the time that he decided—he developed this high tension, that we thought was the world beater; now, that was such a big thing that it overshadowed all the other. I do not think Mr. Milton did anything, practically, but that; he bought a car, and put it on, and it was such a success that we thought it was going to sweep the country; and I went down to Detroit, and got this large order,

after a great deal of—after various experiments, that we thought were entirely conclusive.

Q Now, Mr. Webster—

A Yes, sir.

Q You say that when he first got back from Europe,—or, before he went to Europe he did at some time or other, in connection with the affairs of this company, have to do with the low tension?

A Yes, sir.

Q To what extent?

A Oh, very largely in the building up of it, until it was really not a success, you know. We were striving after something, and not getting anywhere; and then he developed 475 this high tension, which we thought was a great thing.

Q And then after he started to develop the high tension you remember now, do you, quite definitely, that he did not have anything more to do with the low tension work?

A Practically not, no.

Q Well, now, when you say 'practically not', did he to any degree have anything to do with the low tension work?

A Well, Mr. Bulkley, you must know that a man in my position as President of two or three companies, this one thing, this high tension machine overshadowed everything; it was going to be a million dollar gamble.

The Court: Read the question, and let him answer that.

(Pending question read as follows:) "Q Now, when you say 'practically not', did he to any degree have anything to do with the low tension work?"

The Court: That is, while he was engaged in this high tension business.

A To a very small degree, if any.

Mr. Bulkley: Q And your recollection is now quite distinct that he did not have anything to do, but to a very small degree, if any—

A Yes.

Q —with reference to the low tension work?

A Yes, sir.

Q After he commenced to work on the high tension magneto.

A Yes, sir.

Q Now, do you know anything about what work he did, at all, on the low tension, after you commenced to work on the high tension?

A Why, I have answered that he practically did none, so far as I know.

476 Q Whom did you consider to be the one in general charge of your development and experimental work at that time, before Mr. Milton went to Europe, and after he commenced to work, as you think, almost exclusively, if not entirely, upon the high tension magneto?

A I had Mr. Kane, and Mr. Chiville, and Mr. Munn.

Q Well, you heard the testimony of Mr. Munn, didn't you, or did you?

A Well, I heard some of it.

Q Do you recollect it?

A Well—

Q Or any part of it, do you think?

A Why, I recollect, I think I recollect what I heard when I was here.

Q Did you hear Mr. Munn say that Mr. Milton was the chief engineer, and his superior?

A He may have said that.

Q At that time? I asked you if you heard him say it.

A I am not sure I heard him say it.

Q What did you say?

A I am not sure that I heard him say it?

Q If he said that, was he wrong about it?

A I do not think his title was Chief Engineer.

Q Well, was he right in saying, if he did say it, that he was his superior and the one from whom he got instructions?

A It is rather a difficult question to answer yes or no, because it was such a small organization; Mr. Milton was the man who was developing a magneto, the low tension magneto, until the time when the high tension magneto absorbed his attention. Now, I do not know whether I can answer it any better than that or not. Your Honor, this is the first time I have ever been on the witness stand. You will have to excuse me.

477 Q What was the name of the product, or of the machine under which you sold, or, which you sold to the International Harvester Company? What did you call it?

A We called it, at first, the Milton.

Q Didn't you call them that up to and through the year 1909?

A I do not know—

Q And prior to that time?

A I think so.

Q Yes.

A Yes.

Q You did for a long time?

A Yes, sir.

Q About when did you make the change?

A Well, I should say that—

Q And call it the Webster Magneto?

A I should think that was about 1909 or 1910.

Q In 1909 or 1910?

A I should say so, yes, sir.

Q You think it was then that you changed?

A Well, the dates you can get, my dear sir.

Q I am asking you for a fact.

A Well, I say I cannot tell.

Q Very well. You knew, didn't you, that you were selling the International Harvester Company a low tension magneto?

A I did.

Q You knew that, at least, didn't you?

A I did, yes, sir.

Q And you knew that for a certain length of time you called it the Milton magneto?

A Yes, sir, that I knew.

Q Do you mean to say that after he commenced to work on the high tension magneto that you stopped using the name "Milton magneto?"

478 A I say I cannot tell you the date we stopped.

Q I didn't ask you what the date was, at all.

A Yes. Then what is it?

Q I asked you if you stopped using the name 'Milton' on the magnetos which you were selling to the International Harvester Company when he commenced to work on the high tension magneto?

A I cannot tell you.

Q Now, Mr. Webster, I invite your attention to this circular, which I believe you have seen before, or referred to before, which is marked Exhibit 16, and which purports to have been issued and distributed by the International Harvester Company in September of 1909. What was the name of the product used in that circular to designate the low tension magneto—

A Milton.

Q Which you were selling to the International Harvester Company?

A Milton. It says so, right here.

(Witness indicates Plaintiff's Exhibit 16, handed to him.)

Q Now, you do not know after having looked at that cir-

cular, I understand, when it was, or how soon after 1909, or how soon after—

A I do not.

Q —that you changed to the name 'Webster magneto'?

A No, I do not.

Q And you haven't any idea how soon you changed?

A Well, within a range of ten years.

Q You know you did not change immediately after Mr. Kane made this invention, as you say, did you?

A I do not know.

Q You do not know anything about it at all, do you?

A Well, you are asking me dates, and I am telling you I do not know.

479 Q I am not asking you dates.

A Well, you are asking me times. I do not know.

Q Don't you know at all?

A I have told you, within a period of ten years.

Q You cannot approximate the time within a period of ten years?

A Well, I say ten years. I am sure that is right.

Q You say you selected Mr. Kane and Mr. Chiville to enter into competition with one another to produce a design to overcome the defects in your product concerning which the International Company had complained; is that right?

A Yes, sir.

Q And you offered them a prize?

A Yes, sir.

Q For the best one?

A Yes, sir.

Q Did you give Mr. Kane any prize?

A I do not think so.

Q Now, you say you referred to your engineers these two designs, to see which one was the better of the two; is that right?

A I think my testimony was that I probably showed to them; but I haven't any definite recollection of that.

Q But you think you did?

A Yes, sir.

Q Now, to whom did you refer it?

A I do not know.

Q Well, what engineers did you have there at that time?

A We had probably two or three engineers.

Q Who?

A Well, there was the engineer of the Webster Manufacturing Company.

480 Q Who was that?

A Well, it may have been Mr. Perkins, of the Company.

Q Did you look upon Mr. Perkins as an engineer?

A Yes, sir.

Q Of the Company?

A Yes, sir.

Q What other engineer did you have at that time?

A We may have shown it to our chief draftsman; I do not know.

Q Who was that?

A I do not remember, at that time.

Q You do not remember his name?

A No, sir.

Q You have no recollection, in connection with the submission of this design to any of them?

A No, I have not.

Q But you do remember now that you went to Mr. Chiville and to Mr. Munn?

A No, Mr. Chiville.

Q To Mr. Kane?

A Mr. Chiville.

Q I beg your pardon.

A And Mr. Kane, yes.

Q And that you asked them to produce a design.

A Yes, sir.

Q How do you remember that so clearly?

A Why, I do not know whether you can say why one thing fastens on your brain.

Q Well, I am asking you; if you say you haven't any way of ascertaining—

A Well, I say I do know positively that I went up there and spoke to those two men, and said, 'Here, now, we
481 have got to get up something'; and as I say, I think I offered them a prize, yes, sir.

Q And that is all you remember, is it, about what happened or took place in connection with the development of this man Kane?

A In that particular case yes. In this particular case that you refer to.

Q Yes. That is the only one I am referring to.

A Yes.

Q That is all you remember?

A Yes.

Q Not a single fact or circumstance or incident or any-

thing connected with it, except that one thing, is there, in your mind now?

A If you are speaking about that afternoon, or morning; if you carry it along further, there may have been other incidents.

Q Well, what other incidents?

A I do not know.

Q You carry it along a little further, and tell us what incidents there are in your mind, if there are any there.

A Well, I remember, I think I can remember sending him to Milwaukee, but that is a little hazy. Those were routine things, that he did; that was part of his business.

Q What did you send him to Milwaukee for, do you remember?

A Why, to put it on the engine up there, after we developed it.

Q Do you remember talking to Mr. Milton about this thing, at all?

A I haven't any recollection.

Q You will not say that you did not talk with him, will you?

A No, I won't say.

Q You won't say but what you talked with him frequently about it?

A No, I don't think I talked with him frequently.

482 Q Didn't you write him frequently about it?

A That I don't know. If he has got letters, that will show better than my saying.

Q I am asking for your recollection.

A Yes.

Q About it, Mr. Webster.

A Yes.

Q You do not remember but what you might have talked with him several times?

A Oh, I might have. It is quite possible.

Q Do you remember anything at all that was said between you and Mr. Milton?

A About this thing?

Q With reference to this thing.

A I do not.

Q Not a single fact or circumstance or incident which enables you to say whether you ever did talk with him about it?

A I do not remember anything, any conversation with him about it.

Q Now, you do not remember any fact or circumstance at

all which enables you to say whether you ever did talk with him about it?

A No.

Q Or not?

A No, there is nothing.

Q Do you remember any conversation you had with Mr. Kane with reference to taking this invention of his?

A No, I do not. I do not remember that at all.

Q You do not?

A No, sir.

Q Do you remember telling Mr. Kane that you did not want any patent on it?

483 A No.

Q You did not tell him, so far as you now remember—

A No.

Q --anything about whether it was patentable or not?

A No, I do not remember any conversation of that sort.

Q You do not say but what there may have been such a conversation?

A Oh, there may have been, yes, sir.

Q Do you remember Mr. Kane ever talking with you about getting out any patent on anything?

A I do not remember anything of that sort.

Q Do you remember ever having talked with Mr. Kane, and telling him that you got sick of paying money for patents and you were not going to buy or negotiate for any more?

A I do not remember that.

Q Do you have any recollection now, Mr. Webster, as to where the defects were in the means by which the magneto was attached to the cylinder?

A In the original Milton?

Q Yes, in the original Milton.

A Well, the original Milton, as I remember it, was attached to a boss on the engine.

Q And it was the weakness of this boss, was it—

A No.

Q --which constituted the defect?

A No. The boss was small; the Harvester Company did not want to change their design, and we had to adapt it the best we could, and we were allowed to put it on a boss.

Q Now, I am trying to get from you what knowledge you now have.

A Yes.

Q Or recollection, concerning this defect.

484 A Yes.

Q Now, will you tell me to just what specific extent you have now a knowledge of that defect?

A It was an imperfect way of attaching it.

Q This boss was an imperfect way?

A No; the way we could get onto the boss and hold it was so imperfect.

Q What do you mean by 'get onto the boss and hold it'?

A Attach it to the boss.

Q To the boss?

A Yes.

Q Now, in your testimony in this interference, which you looked at a moment ago,—and which seems to have entirely escaped your recollection—

A Yes, sir.

Q —I find that you purport to have said, in answer to this question: 'Prior to the time Mr. Kane submitted his design to you, had you ever seen or heard of a low tension magneto construction of unitary type, that is, one wherein the magneto was mounted on an integral plug and bracket, and the movable electrode arm operated directly from the magneto rotor shaft, as you have explained'; and I find that you answered that you never had known of such a construction. Do you remember having testified to that?

A I tell you, that is the most extraordinary thing. I cannot remember it.

Q Well, if that question was put to you at that time, did you understand what you were talking about?

A Yes.

Q And you understand it now?

A Yes, sir.

Q Do you?

A Yes, sir.

485 Q And you understood that construction, at the time that Mr. Kane showed it to you?

A I don't remember his showing it to me.

Q You don't remember Mr. Kane having showed that to you?

A I do not remember seeing this sketch at all. I suppose that I did see it, and that I turned it over to the engineers, and we approved it, or I went down and showed it to Mr. Cavanaugh, and he approved it.

Q Now, at the time, Mr. Webster, that these designs were produced by Mr. Chiville, and Mr. Munn—

A Mr. Kane.

Q Mr. Kane.

A Yes.

Q Thank you—you knew enough about it to appreciate the fact to be that prior to that time there was no such thing known to you as a low tension magneto construction of the unitary type, that is, one wherein the magneto was mounted on an integral plug and bracket, and the movable electrode arm operated directly from the magneto rotor shaft, 'as you have explained'?

A Yes.

Q You knew at that time that no such construction was in existence?

A That I had not seen it.

Q That you had not seen it.

A Yes.

Q You know enough about that construction of this apparatus at that time to know that you never had seen that sort of a construction before.

486 A Yes, sir.

Q Now, did Mr. Kane tell you what he had developed, at that time?

A Mr. Bulkley, I have no recollection beyond what I have told you of that incident. My mind is almost a blank about it. All I know is I remember distinctly that it was a success, that it was brought before the Harvester Company, I presume by myself, because I did that; I went personally to see Cavanaugh; that is the way I did it; and that Cavanaugh's approval of it, to my judgment, settled the whole thing.

Q I am trying to get at what it was that Mr. Kane showed you, if you know.

A I do not know what he showed me. I do not remember of having seen—

Q How do you know, how do you know, Mr. Webster, that this design that was submitted ultimately to Mr. Cavanaugh, was the design that Kane had at the time that it was submitted by him in conjunction with Mr. Chiville? How do you know that it was the same design as that?

A Well, the same as you would; it could not be anything else but the same design. There was no legerdemain that he could change it to something else.

Q How do you know but what it was the design of somebody else that was adopted, rather than that which Mr. Kane produced in conjunction with Mr. Chiville?

A Well, it was done so quick, I don't think a man in one day could get up a design that was successful, and bring it out.

Q Didn't you hear Mr. Kane say that he had gotten it up in one day?

A He made the design in one day.

Q Yes.

487 A Yes, he said. Very true. But it was all done under our roof.

Q I am not inquiring as to where it was done.

A But it was done right in the—

Q Done in one day?

A Started right off, doing it, yes.

Q You asked him, one day, to get a design for you?

A Yes.

Q And he got it the next day?

A The day following.

Q Well, the day following.

A Yes.

Q All right. You do not know what that design was, or anything about it, do you?

A Yes, I do. Don't ask me a foolish question like that.

Q What was it?

A Of course I know.

Q What was it?

A It was the design that we adopted and put on our engine.

Q You are sure?

A Yes.

Q That it was the one you adopted?

A Yes.

Q And put on your engine?

A Yes.

Q Did he explain it to you at that time?

A I don't know whether he did or not.

Q Did you see any drawing of it at that time?

A I do not know whether I did or not.

Q Then how do you know that it was the same design, that he explained to you on that day, that subsequently went on the engine?

A Because, Mr. Bulkley, I know that that machine was

made right off from that design that was in the factory
488 there, and that I am practically sure I took that design
right down to Mr. Cavanaugh, and showed it to him, and
got his approval.

Q Now, you say you took 'that design.' What design?

A Why, the Kane design?

Q Did you take the drawing?

A I think so.

Q I thought you said you had not seen the drawing?

A Well, I say it does not register in my mind, as if you
would bring either of these papers (indicating) and say
"Did you see that paper"? I don't know that I did, but I
think that undoubtedly I did.

Q You say it does not register in your mind now.

A Yes.

Q That you took a drawing.

A No. I say—

Q Will you wait until I get the question?

A Well, I know just what you are going to ask.

Q And if I am not right, you can correct me.

A Yes.

Q Did I understand you to say that it registered in your
mind now that you took the drawing that Mr. Kane had sub-
mitted, or the design of Mr. Kane, down to Mr. Cavanaugh?

A I said that I thought I did.

Q Yes.

A I think I did.

Q Well, do you mean by that 'think', that it now registers
in your mind?

A No, no more than that; that is my language. I think
it is good English; I think that I did it.

Q Well, I am asking you.

A Well, that is all my answer. I think I did it.

Q You have expressed yourself frequently with reference
to what does or does not register in your mind.

A Yes.

489 Q Now, does that fact now register in your mind?

A No more than it did ten minutes ago.

Q Now, you say that you think you took a drawing, the
drawing which Mr. Kane had made?

A Yes.

Q Of his design?

A Yes.

Q Down to Mr. Cavanaugh?

A Yes.

Q Soon after Mr. Kane's design was approved?

A Yes.

Q Did you look at that drawing, if you did take a drawing?

A I suppose I looked at it, yes.

Q You don't know?

A That thing is not photographed on my mind. That whole matter of the engineering end I left to others.

Q Was it photographed—is it photographed in your mind now, Mr. Webster, that you took the Kane design down to Mr. Cavanaugh, soon after it was approved?

A I am morally certain I did. That is all I can answer you.

Q Did you know what that design was that you were taking down to Mr. Cavanaugh?

A Yes.

Q Or anything about it?

A Why, yes.

Q What was it?

A It was the same machine that we afterwards put on the engine.

Q Well, how did you know that?

A Well, the same as I have got ordinary intelligence, Mr. Bulkley. Now, if you do not understand that, I cannot give any other answer.

490 Q And you did not receive any explanation from Mr. Chiville or Mr. Munn or Mr.—

A Mr. Chiville—

Q Or Mr. Milton, or Mr. Kane, about this design, did you?

A Mr. Milton, and Mr. Munn—all of us undoubtedly talked about it.

Q But you don't remember anything about it?

A But, now, the thing that I remember, and if you had been in my place you would probably remember, was, I was after results; and when Mr. Cavanaugh approved of that, that ended it; the thing was banished from my mind; it did not make any difference how many drawings they had; I wanted the machine, and wanted it right.

Q Do I understand you to say that you did not, as you now remember, learn from Mr. Kane, from Mr. Munn, or Mr. Chiville, what Mr. Kane's design was?

A I undoubtedly—

Q The time that it was approved?

A I undoubtedly did not know all about it. I undoubtedly did. But the details of it I do not remember.

Q You say now that you cannot remember when it was that Mr. Kane submitted this design to you; is that right?

A Why, yes, I can fasten it in my mind, through that letter that they wrote us; and we commenced right away, when I saw the seriousness of the situation, I got right after these two men to make this design.

Q Now, Mr. Webster, you do not remember, as I understand you, anything about talks or correspondence with Mr. Milton regarding the taking out of a patent in connection with the subject matter of this means of fastening the magneto and plug to the engine?

A I do not remember anything about it. There may have been—

491 Q You never saw any such patents, did you?

A I do not say that.

Q I ask you, if you ever did or not.

A I do not know. My answer is, I do not know.

Q You never talked about it, did you, with Mr. Williams?

A With Mr. Williams?

Q Yes.

A I may have.

Q You don't remember of ever having talked about it at all?

A Why, no. It was not a matter of much importance at all.

Q Wasn't it a matter of some importance to you?

A Not—

Q When you bought the Kane application.

A Well, but as I said before, I follow the advice of my attorneys, just the same as I take medicine from my physician; I do not know.

Q Do you take the medicine that the patent attorney gives you, and say nothing?

A As a rule.

Q But pay the money?

A As a rule, yes, sir. I hire that kind of an attorney.

Q And you mean to tell me that you have—Pardon me for putting the question in that way—You do not remember of having talked with Mr. Williams at the time you were negotiating for the purchase of the Kane application?

A No.

Q You did not learn from him what money was to be paid for, did you?

A Well, at that time I was not as active in the Webster, the management—

492 Q Well, whether you were active or not, did you or did you not learn what the Kane application was about, and why you were going to pay this money?

A No, none of the details did I know.

Q Well, did you not learn the fact that you were going to buy the Kane application?

A Yes, I heard that.

Q And you did not have interest enough to inquire what the Kane application was about?

A Sure, yes.

Q And you did not inquire about it?

A Why, no. Why should I?

Q Now, you want to be understood, do you—

A Yes, I want—

Q —that when you went—Did you go to Mr. Williams' office at all about the purchase of the Kane patent?

A I don't remember.

Q Or application?

A I do not think so.

Q Who told you that you were going to pay a large sum of money for an application for a patent?

A Wait a minute. I did not pay it.

Q Well, the company?

A Yes, the company.

Q You learned that the company was going to pay a large sum of money for an application?

A Yes.

Q Did you?

A I was entirely satisfied to rest on that, rest it there.

A I am not sure but it was all paid for before I knew anything about it.

493 Mr. Bulkley: Q You are not sure about that?

A No, sir.

Q Did you ever learn that the Company had bought—

A Yes.

Q —a Kane application?

A Yes.

Q Who told you that?

A I think either Mr. Maurice Rosenwald or Mr. Brown, or Mr. Becker; I do not know.

Q And did they tell you who conducted the negotiations?

A Mr. Brown, I think, conducted them.

Q And he may have bought this application of Kane without saying anything to you about it?

A I do not know. Quite possible.

Q Or without your knowing anything at all about it?

A Quite possible. He had—

Q Do you think that is a fact?

A I rather think it is a fact. We have other—

Q I do not ask for the explanation.

A All right.

Q I ask you to answer the questions.

A Yes. All right.

Q Did you learn how much you paid for the Kane application?

A Yes.

Q How much was it?

A I understood it was \$12,000.

Q You have got some considerable investment in this Company?

A Yes.

Q And were President of it?

A Yes.

Q Weren't you?

A Yes, sir.

Q And you want us to understand that your company paid \$12,000?

494 A Yes.

Q For applications for patents?

A Yes.

Q When, as you have said, over and over again you have been bunkoed, for years, by inventors?

A Yes. Wait a minute.

Q When—

A I did not say 'bunkoed'.

A As near as I can recollect my language, it was that I was had been 'buffaloed.' I do not think that is as bad as 'bunkoed'.

Q All right, sir. Then we will substitute the word 'buffaloed' for 'bunkoed'.

A Yes. I do not think these men intentionally cheated me.

Q All right. You were buffaloed?

A Yes.

Q Your experience has been, and was, prior to the time that you paid \$12,000 for this, that the Company paid \$12,000 for the Kane application, your experience was that you had been buffaloed in connection with the purchase of patents and applications from inventors?

* * * * *

A My answer was that it is a fact that in most of my adventures in patents I have come out,—furnished the money, and ended by holding an empty bag. That is about what I said.

Q Now, notwithstanding your experience, we are to understand that you permitted your company, while you were President of it, to pay \$12,000 for an application for a patent, and you did not know what that application covered, or anything about it; is that right?

A Practically so. I am an optimist man.

495 Q Were you ever informed anything about this Kane application, and what it related to?

A Oh, in a general way, yes.

Q Who informed you about it?

A Oh, probably Mr. Williams and Mr. Brown. I have heard talks about it.

Q What did they tell you it was about?

A It was very essential to buy it, to protect our interests.

Q Was that all he told you?

A That was practically all, yes.

Q And did this occur before you bought it?

A Did what occur?

Q This conversation you had.

A I think so, yes, sir.

Q This conversation with Mr. Williams.

A I imagine so, yes.

Q And that was all the information that Mr. Williams gave you, before the \$12,000 was paid?

A All that I got.

Q And you never asked him for any information about Kane?

A I do not think so.

Q You do not say you did not?

A I am practically sure.

Q You are practically sure you did not?

A No.

Q At least, you have no recollection now of ever having asked it?

A No.

Q When did you find out that this Kane application, for which you paid the munificent sum of \$12,000, was an application of Kane, which covered this design, which he had made away back in 1909?

496 A I know nothing about the details of it.

Q You never learned that, did you?

A I do not know anything about the details of it.

Q Well, you never learned that specific thing, did you?

A What specific thing?

Q As to the fact that this application of Kane, which you bought and paid \$12,000 for, covered the design which Mr. Kane had submitted to you back in 1909? When did you learn that fact, if at all?

A I do not think that I ever knew it.

Q At any time?

A No, I do not know that—

Q You did not know it when you testified—

A I do not know that—

Q —if you did testify it, in this interference case.

A I have told you that that is the most extraordinary thing; I cannot remember going into Williams' office, and testifying; you have got it there in print, and I must have done it, but I do not know why I cannot remember it, but I cannot.

Q Now, Mr. Webster, let me ask you a general question: Do you mean to tell us that you learned that your corporation proposed to buy an application of Kane? Did you learn that?

A Well, I heard it, yes.

Q Who told you that?—

A I do not know.

Q —let me ask you, again.

A I should say one of three persons, Mr. Brown, Mr. Becker, or Mr. Maurice Rosenwald.

Q Do you know where it was that you were informed,—where you were?

497 A No, I do not.

Q When that information was given to you?

A No, I do not.

Q Nothing about that, at all?

A It may have been at a directors' meeting. I am not sure.

Q Do you know where Mr. Chiville is now?

A No, I do not.

Q Has he been here in the court room?

A I do not know. I do not think so. Not when I have been here, he has not.

Q I called your attention a few moments ago to the question and answer in this deposition which you gave, or what purports to be your deposition, in this interference case.

A I do not doubt it a bit.

Q And to make it more definite and certain, I will ask you if at the time Mr. Kane submitted to you his design you knew that there never was such a thing, so far as any information that you had about it, as a low tension magneto construction of the unitary type, that is, one wherein the magneto was mounted on an integral plug and bracket, with a movable electrode arm operated directly from the magneto rotor shaft, 'as you have explained'?

A I know of no such—

Q You knew of no such thing?

A Yes,—I knew of no such thing.

Q Now, at that time, if you had been shown such a construction, that is, in April of 1909, as that, you would be so far able to recognize it as to know that you had never seen such a thing before?

A I would be able to recognize it.

Q Yes, and you would know that you had never seen any such construction as that before?

A I believe I should remember, yes.

498 Q But you cannot say now whether Mr. Kane ever explained to you or showed you an illustration of any such construction in April of 1909?

A Oh, yes, I would say he did.

Q You say that he explained it to you at that time?

A I have no doubt but what he showed me the design, and gave me a general explanation.

Q I am not asking, Mr. Webster, as to what your doubts are about it.

A Except what?

Q Does it register in your memory—

A It does not register.

Q —that he did make such an explanation to you at that time?

A It does not register in my memory that I saw—that I had that talk with him, or saw the design.

Q Mr. Webster, didn't you at any time learn that there was a contest between Milton and Kane as to this design which he submitted to you in April of 1909?

A I think I learned of it through Mr. Brown.

Q About when was that?

A Oh, I should say two or three years ago. I cannot name any date.

Q What did Mr. Brown tell you?

A I do not remember.

Q If you have any such registration as to that in your mind?

A No.

Q Nothing at all?

A No.

Q He simply told you that there was a contest between Kane and Milton?

A Yes.

499 Q As to the inventorship of this subject-matter?

A Yes.

Cross-Examination Resumed by Mr. Bulkley.

Mr. Bulkley: If your Honor please, Mr. Milton has some letters in his possession, as I understand, which relate to this controversy, and is here under subpoena, our subpoena. He showed those letters to Mr. Williams and myself, and in the spirit of fairness I want to get those letters from Mr. Milton and let Mr. Webster see them. Mr. Milton, will you produce for us those letters which you showed to Mr. Williams and myself?

(Letters produced by Mr. Milton.)

Q Mr. Webster, did I understand you to say yesterday that you never saw or knew anything about, so as to identify it, this English patent of Mr. Milton's, which related to this thing which is involved here?

A I have no recollection of it.

Q You now say you have no recollection?

A No.

Q Now, Mr. Webster, I am going to show you the letter. Will you look at this letter (handing same to witness)? Is that your signature to that letter, and did you write it?

A It looks like my handwriting, and there is every indication that I wrote it.

Q Don't you know, Mr. Webster, whether you did write that letter or not? Have you any doubt but what you did write it?

A Yes, I undoubtedly wrote it.

Q And to whom was that addressed?

A John Milton.

Q The man who was then associated with you in connection with this magneto business?

500 A Yes, sir.

Mr. Bulkley: The letter identified by the witness is marked for Identification Defendants' Exhibit 4.

Q Did you write that at the Union League Club, or don't you remember about that?

A Of course I do not remember about it, but it undoubtedly was written in the Union League Club. I do not have their stationery in my office.

Q This letter says, 'Please write me at N. Y., 88 Reade Street, how the small sized magneto comes on, if you get a good spark'. Do you know to what that refers?

A I am not sure.

Mr. Peaks: What is the date of that, Mr. Bulkley?

Mr. Bulkley: The letter is dated April 16, 1909.

Q Don't you know that the small sized magneto was the low tension magneto, Mr. Webster?

A I should think not.

Q Then you think, do you, that this reference was not to the low tension magneto?

A That is my—

Q Do you?

A That is my present opinion, yes, sir.

Q Yes.

A Yes, sir.

Q You think it referred, do you, to the high tension magneto?

A I am of that impression.

Q Yes.

A Yes.

Q Have you got anything which registers in your memory as to what you referred to as the good spark?

A Why, I do not think there was any question about the spark of the low tension; and I know at about that time I was tremendously interested in this high tension.

* * * * *

501 Q The low tension magneto was what might readily be called a small sized magneto?

A Yes, it might be called a small size.

Q And the high tension magneto was a big one, or a larger one, was it not?

A I think not.

Q You think not?

A Yes.

Q Do you?

A I think not.

Q Well, are you reasonably sure?

A Yes.

Q About that?

A Yes, reasonably sure.

* * * * *

Q The high tension was smaller than the low?

A I say that is my opinion.

Q Yes.

A At the present time.

Q Exactly. Now, I call your attention to what purports to be a letter of May, 1909. Did you write that letter?

A Yes, I recognize this letter (indicating letter handed witness).

Q To whom was that letter written?

A Mr. John Milton, I think.

Q Don't you know it was written to Mr. John Milton?

A Oh, it undoubtedly was.

Q Do you have any recollection of having written that letter? Does it register on your mind in any way that you ever wrote any such letter to Mr. John Milton?

A Well, I wrote—

Q From New York?

A No, I do not remember especially that letter. I
502 know that I was there talking with the Fairbanks people.

Q What were you talking with the Fairbanks people
about?

A To interest them in the magneto.

Q In what magneto?

A The low tension magneto.

Q Now, who was Mr. Wells, referred to in this letter?

A I think he was President of the Fairbanks Company, of
New York.

Q And what business was the Fairbanks Company engaged
in at that time?

A In manufacturing or selling gas engines.

Q What kind of gas engines?

A Stationary.

Q Stationary gas engines?

A Stationary gas engines.

Q Were they not?

A Yes, sir.

Q Who was Mr. Haddock referred to in that letter?

A Who?

Q Haddock.

A Why, I imagine that Haddock was the head of that de-
partment. I am not sure.

Q The head of what—

A The gas engine.

Q The gas engine department?

A Yes.

Q Of the Fairbanks Company?

A I rather think so.

Q Now, what did this expression in the letter mean, after
the words 'all right', 'on Field?-B'?

A Field-Brundage.

Q What was the business of the Field-Brundage Com-
pany?

503 A Manufacturing gas engines.

Q What kind of gas engines?

A Stationary gas engines.

Q Then I understand that you say in this letter that you
had interviews with the Field-Brundage people?

A Yes.

Q With reference to the low tension magneto?

A Yes, sir.

Q In May, 1909; is that right?

A If that is the date of the letter.

Q Yes. Is that date of that letter in your handwriting?

A Yes, sir.

Q You haven't any reason to suppose that it was not written on that date?

A No.

Q Have you?

A No, I have no reason whatever.

Mr. Peaks: Has that letter been marked, Mr. Bulkley?

Mr. Bulkley: No, it has not. The letter identified by the witness is marked for identification as Defendant's Exhibit 5.

(The said letter was thereupon marked as Defendants' Exhibit 5, the first sheet being marked '5-a', and the second sheet '5-b').

Q I find here a reference to Bates & Edwards.

A Edmonds.

Q Edmonds?

A Yes, sir.

Q What were they?

A Manufacturers of stationary gas engines.

Q Now, do I interpret this letter right when I say that it states that the Field-Brundage Company would have Bates & Edmonds send one of their engines, that is, Bates & Edmonds engines, to put the spring type on? Is that your understanding of that letter?

504 A Shall I read it, that part?

Q Perhaps you had better read it, yes.

A (Reading): 'If the attachment of the magneto proves out all right on the Field-Brundage'—It is marked 'Field-B', 'they will put it on all of their engines. They will have Bates & Edmonds send one of their engines to put the spring type on'. Shall I read the rest?

Q What did you refer to as the spring type, if you now know or remember anything about it?

A Why, I understand that it was the Milton magneto.

Q Low tension magneto?

A Yes.

Q Was it not?

A Yes.

Q Now, this letter further says that 'the other style'—I do not know what this word is next after 'style', Mr. Webster. What is it? I will let you read it.

A (Reading:) 'The other style back of the fly wheel was so hard to start that they have not been selling any'.

Q Now, that referred to what, if you now have any recollection about it?

A That referred to one of the first styles, which we attached to the fly wheel of the engine, one of the old styles.

Q Now, after you have looked at this letter, doesn't it occur to you that you had a pretty familiar knowledge of what was going on mechanically at that time?

A Well, I do have a general knowledge, mechanically, of the engine,—of the magneto.

Q I show you another letter, Mr. Webster, which purports to be dated May 21, 1909, and which also purports to be written, I think, by Mr. Milton to you, and I ask you whether you have any recollection of receiving such a letter as this from him, after you have carefully read it.

505 (Letter shown to witness.)

A I have no doubt Mr. Milton wrote this letter.

Q Have you any doubt but what you received this letter from Mr. Milton?

A No reason to doubt it.

Mr. Williams: Q. Will you speak, just a trifle louder, Mr. Webster? What was that answer?

(Answer read.)

A I have no reason to doubt it.

* * * * *

(The said letter was thereupon marked as Defendants' Exhibit 6).

Mr. Bulkley: This letter says: 'We are today in receipt of a letter from Bates & Edmonds Motor Company, advising us that Fairbanks & Company had asked them to send us an engine for attaching our oscillating type of magneto'.

Q Do you know what was referred to by the expression: 'oscillating type of magneto'?

A I think it was the Milton type.

Q Well, what was that? Low tension, was it?

A Yes, sir.

Q And you have no doubt that on May 21, 1909, you received from Mr. Milton such a letter as this?

A I have no doubt of it.

Q Now, this letter further says, 'I am writing you today to urge your getting the Fairbanks Company to take the 150 magnetos that we have made especially for their small vertical

engines, for the reason that as soon as they see this oscillating type of magneto they will not consider this old type, whereas now they very probably would, especially if we quote them a low price'. Now, I will ask you, Mr. Webster, with respect to these 150 magnetos, what kind of magnetos do you understand they were?

506 A Why, my belief is that they were the magneto that was referred to in the other letter, and that was attached to the fly wheel.

Q Was it a low tension magneto?

A It was, yes.

Q Now, it says that this Company would not probably—'would not consider this old type'. To what did that refer, if you now have any recollection, as the 'old type'?

A Why, my belief now is that it was the type that was attached to the fly wheel.

Q I show you another letter, which purports to be dated May 22, 1909. Do you recognize the signatures—the initials, at the bottom of that letter, as having been made by you?

(Letter shown witness.)

A I think this is my signature.

Mr. Bulkley: Q Have you any doubt about it?

A No, I haven't any doubt of it.

Q To what type of magneto did this letter refer?

A High tension.

Mr. Williams: What was the answer?

Mr. Bulkley: High tension.

Q This letter says that 'Am glad to know that the Harvester magneto has been expressed'. What kind of a magneto was referred to as the Harvester magneto?

A I think that is the magneto that has been talked about in court as the Kane improvement.

Q I asked you what type of magneto it was. Was it a low tension or a high tension?

A I think it was a low tension.

Q Don't you know it was?

A I think it was a low tension.

Q Did you ever sell any high tension magnetos to the
507 Harvester people for stationary engine work? Don't you know that you never did?

A I do not think we ever sold any high tension, to the Harvester people.

Q Don't you know that you always sold and provided low tension magnetos for Harvester concerns—

A That was my—

Q —and builders of stationary engines?

A Yes, sir.

Q So that, Mr. Webster, don't you know that when you see the expression 'Harvester magneto', that it necessarily refers to a low tension magneto, and not to a high tension magneto?

A Practically sure.

Q Yes.

A Yes, sir.

Q Now, you refer in this letter to the foreign patents which you received at the hands of Mr. Chiville. What foreign patents were those?

A I do not know.

Q Do you remember anything about it?

A I remember nothing about it.

Q Who was the Mr. Chiville referred to in this letter?

A Mr. Chiville was an employee of our company, and has been referred to in these statements.

Q Is he the one who engaged in this prize contest of yours?

A Yes.

Q To make a design?

A Yes.

Q Did you request that Mr. Chiville be sent down there to you?

A I told him to come down.

Q Yes. You did not tell Mr. Milton—

A I do not know.

Q —to send him down?

A I should hardly think so.

508 Q Why would you say you would hardly think so?

A Because I was in command of the situation, and told my employes to go where I wanted them to go.

Q You have no doubt, Mr. Webster, but what you wrote this letter to Mr. John Milton, in Chicago?

A I have already so stated.

* * * * *

Mr. Williams: What is the date of that, please?

Mr. Bulkley: May 22nd, 1909.

(The said letter was thereupon marked as Defendants' Exhibit 7 for Identification.)

Mr. Bulkley: Q. I show you another letter, of May 21, purporting to be written on May 21. Is that your signature,

and have you any doubt as to whether that letter was written by you to Mr. John Milton?

(Letter shown witness.)

A The letters presented have been all from New York. I think that ought to be noticed. Yes, I wrote that letter.

Mr. Bulkley: The letter referred to by the witness is marked for identification Defendants' Exhibit 8.

(Said letter was thereupon marked as Defendants' Exhibit 8 for Identification.)

Q To what magneto did this letter refer?

A High tension.

Q Who was Mr. Toner?

A I do not remember.

Q —referred to in that letter?

A I do not remember.

Q You say that you thought that it was best to wire for Chiville to come on. That is the same Chiville—

A Yes, sir.

Q —to which the other letter referred?

A Apparently, yes, sir.

509 Q And you were reporting to Mr. Milton the fact that you had wired for Mr. Chiville to come on?

A Yes, sir.

Q Look at this letter, or copy of letter, and state whether you received any such letter as that from Mr. Milton, or can identify that in any way as having been received by you from Mr. Milton? (Showing letter to witness.)

A Why, I think I received this letter. I have no reason to believe I did not.

Mr. Bulkley: The letter referred to by the witness is marked for identification as Defendants' Exhibit 9.

Mr. Williams: What is the date of that one?

The Reporter: May 24, 1909.

(Said letter was thereupon marked as Defendants' Exhibit 9 for Identification.)

Q To what type of magneto did this letter of May 24, 1909 Exhibit 9 refer?

A The first part of the letter speaks of a high tension magneto.

Q Look at this letter; did you write this letter to Mr. Milton? Is that your signature to it?

(Another letter was handed the witness.)

A That is my signature, yes, sir. That is my signature.

Q You have no doubt you wrote that letter, have you, to Mr. Milton?

A I have no doubt I wrote that letter.

Mr. Bulkley: Marked for identification as Defendants' Exhibit 10.

Mr. Williams: Q What is the date of that, please?

Mr. Bulkley: May 1, 1909.

(Said letter was thereupon marked as Defendants' Exhibit 10.)

Mr. Bulkley: Q To what type of magneto did this letter refer?

510 A High tension.

Q I ask you to look at a letter which purports to be dated May 6, 1909. Is that your signature, and did you write that letter to Mr. John Milton?

(Another letter was handed to witness.)

A That is my signature.

(At this point a discussion took place as to the manner of presentation of letters to the witness, examination of them, etc.)

Mr. Bulkley: Q Now, I want you to look at a letter purporting to be dated May 6th, 1909. To what magneto was reference made in that letter?

(Letter shown witness.)

A This was the high tension magneto.

Q Do you know to what letter you refer as 'your letter regarding Bates & Edmonds' proposition'?

A That is one of the letters that you read to me. Bates & Edmonds were manufacturers of engines; and the letter that you have presented to me a few minutes ago referred to that, low tension magneto. Bates had—

Mr. Bulkley: The letter of May 6, 1909, referred to by the witness, is marked for identification Defendants' Exhibit 11.

(The said letter was thereupon marked as Defendants' Exhibit 11 for identification.)

Q I show you a letter purporting to be dated May 8, 1909. To what type of magneto did that letter refer?

(Another letter was shown to the witness.)

A It may refer to two magnetos; I cannot be sure. The magneto that was referred to as being mounted on the car was a high tension magneto.

511 Q And the other one.

A I do not know.

Q You do not know?

A No, sir.

Q Well, what do you think was referred to?

A I do not know.

Q You do not know anything about it?

A I do not know, is my answer.

Mr. Bulkley: The letter of May 8, 1909, referred to by the witness, is marked as Defendants' Exhibit 12 for Identification.

(The said letter was thereupon marked as Defendants' Exhibit 12 for Identification.)

Q I ask you to look at that letter, and ask you to what the reference is, made in this letter, purporting to be dated May 8th, 1909?

A High tension.

(The letter last shown the witness was thereupon, at the request of counsel, marked as Defendants' Exhibit 13 for Identification.)

Q Look at this letter, purporting to be dated 5/10/1909, and I wish you would read that letter, Mr. Webster.

(Another letter was shown to the witness.)

A (Reading:) '5/12/09. T. K. Webster, President Webster Manufacturing Company, New York City.

'Dear Mr. Webster: I have your two letters of the 8th inst., and in reply thereto desire to state that there have been ordered dies for the smaller type of low tension magneto which is to be used on the Harvester work. The smaller type magneto for jump spark work has been necessarily side-tracked for various interruptions. Just prior to taking our inventory we had to concentrate our attention on getting the equipment ready for Mr. Chiville. The inventory was a 512 serious interruption, and since then we have been very busy attending to the Harvester Company's demands. They have got intensely interested, telephoning several times a day, as well as telegraphing us from Milwaukee. This has all been supplemented by the letters, by many letters; so that you can readily see why we have concentrated our attention to this live business. We expected to make shipment today that will satisfy your immediate demands, which will allow us to go back to the high tension magneto tomorrow. I have done nothing further on the completion of the small high tension coil. I am pleased to note from your various communications that the magneto is working satisfactorily.'

Q What do you understand by the reference to live business in this matter?

A I suppose it means the Harvester business.

Q Yes, and that was the low tension business, was it not?

A Yes, sir.

Mr. Bulkley: The letter referred to by the witness is marked for identification as Defendants' Exhibit 14.

(The letter last shown the witness was thereupon, at the request of counsel, marked as Defendants' Exhibit 14 for Identification.)

Q Look at this letter of April 22, 1909, and tell us to what this letter had general reference, what type of magneto.

(Another letter was shown to the witness.)

A This letter was written by me, and referred to a high tension magneto.

Mr. Bulkley: The letter referred to by the witness is marked for identification Defendants' Exhibit 15.

(Said letter was thereupon marked as Defendants' Exhibit 15 for Identification.)

513 Q Mr. Webster, did you go to Europe with Mr. Milton and a patent attorney by the name of Alexander, in the year 1907?

A I did.

Q And what did you go there for with him?

A To show a low tension machine on a car.

Q On an automobile?

A Yes, sir.

Q And about how long were you over there with Mr. Milton and this Mr. Alexander?

A I was there, I imagine, a month, perhaps.

Q And then when you returned did Mr. Milton take up the magneto work of the Webster Company?

A I think he did.

Q You haven't any distinct recollection about when it was you got back?

A Yes—I think he did.

Q Have you any recollection as to about when it was you got back from Europe?

A I said I was there about a month.

Q Oh, I beg your pardon. Let me ask you, Mr. Webster, if you can read drawings, understand drawings, mechanical drawings, when you see them.

A I do not read them.

Q You do not understand them?

A Well, that is not the right question. A man can understand a thing partly, and not entirely.

Q Yes.

A I am not a technical man.

Q All right.

A And I do not read drawings at sight.

Mr. Bulkley: All right, sir. That is all.

Q This last letter that has been referred to as Defendants' Exhibit No. 15, dated April 22, 1909, reads in part, a letter written apparently to John L. Milton, care of the Webster Manufacturing Company, from New York City, and signed by you; 'I have apparently succeeded very well here; I have got a man who is interested who owns the control of the Maxwell-Briscoe Company.' What business was the Maxwell-Briscoe engaged in?

A Manufacturing automobiles.

Q And a little later in this letter, 'Our arrangement is that I shall come back next week with a machine, and put it on the Maxwell-Briscoe car, if it is here in New York.' What type of machine was to have been put on that car?

A High tension.

Q Now, Mr. Webster, in 1908 and 1909, what was the business of the Webster Manufacturing Company, with which you were connected?

A Manufacturing machinery that went to grain elevators, conveying and elevating machinery. We had a foundry and a machine shop, sheet iron shop.

Q And you manufactured engines, I believe you said?

A Yes. Gas engines.

Q Now, what was the relationship between this conveyor business and the engine business and the magneto business, in so far as the volume of the other business compared with the volume of the magneto business, or the relative importance of the two, or the stage of development of the two lines of business.

A The magneto business was a business we were trying to develop, and was a losing proposition. It was our hope that it would come to something, that kept us at it. In volume it was nothing, compared with our other business.

Q You were asked some questions about this high tension magneto business with the Cadillac Company, which I be-

lieve you said you could illuminate, but were not given
515 the opportunity. Won't you describe briefly, and in a general way, what that high tension Cadillac business was that occupied your time and attention, as I believe you explained?

A Why, in the development of this magneto business it took two types; one was the low tension, which we had been working on for two or three years, and met great obstacles, continual changing, and development, that would naturally be in a business that was in the embryotic state; it had to be developed; and we had been just sticking to it and plugging along, and not making any money at all; and Mr. Milton, who was our electrician, the man we depended on very largely in this matter, developed what we thought was a very great idea, in a magneto for automobiles, and of course, if he was right, there was an enormous field. Mr. Milton bought a Cadillac car, build this magneto, and put it on, and it ran. I had an acquaintance, I might say almost a friendship, with Mr. Leland, the President of the Cadillac Company, and I think I showed him the car here in Chicago, and let him ride in it, but in any event we built a magneto; I took it down to the Cadillac people; they put it on a car, and as I remember now they had their demonstrator drive across the State of Michigan, to Holland, Michigan, where I had a little farm at the time, over the sand roads, and at the time I think I had one of my first jolts from Milton; I wanted him to go along with the demonstrator; he was the inventor; and he was not able to go,—he said he was sick. And I went with him. I went with the man, and we drove across there, and he came back, and reported very favorably to the Cadillac Company. Then we put it onto a car, and they put, I think, seven men into the car, and went out and tested it in every way.

The magneto had one very important advantage over anything at that time. The self starter was not known. But we were able to start that car from the seat, with our magneto.

And they went out and tested this car, and came back
516 and gave us the order. Their first order was—It was their first, initial order, but it really carried with it an order for about, well, the order I figured was about \$320,000 or \$360,000, for their year's requirements, on which there was a very handsome profit.

He gave us that order, as I remember, on Mr. Milton's birthday, which was the reason that it was firmly fixed in my mind; it was the same day as the Fall of the Bastille,—wasn't

that right? I think the 20th of July. That thing was fastened in my mind by that point. And of course we were greatly excited, and greatly pleased, that we had really done something in the magneto business. And we were to receive an order, we were to commence delivering at fifty magnetos a day; and I thought I was on Easy Street,—the thing had gone right.

Mr. Bulkley: I did not hear the last.

A I thought I was on 'Easy Street'. I thought the thing had gone right at least; so I started at once; I rented a place in Tiffin, Ohio, and bought machinery, and started in. Then I do not know why, I do not know today why, but Mr. Milton went at once to Europe, I understand with Mr. Teagle, in the interest of some foreign patents which he expected to exploit there, and which I thought I owned; and of course we had a very serious—it left me right up in the air, so to speak; but we had agreed to deliver fifty machines a day, and we started in, bought the machinery, ordered everything necessary; and then, when we made the first machines, why, we could not get the same result. In a manufacturing experience of about thirty or forty years, I never have seen its equal; we made this hand machine, and it worked, and we never could duplicate it, which was very extraordinary. I hired the best electrical experts that I could get into Chicago, brought them there, and Mr. Leland brought down to Tiffin this man who made such a great success in the Delco System, Mr. Kettering, who is considered now one of the great electrical engineers; and he tried to help us; but 517 the final result was we never could make a practical machine out of that magneto; and of course it was a very serious loss and blow to us; and that is one of the reasons why some of these things are hazy in my mind; I was simply tremendously interested in this high tension thing. And when I had got, as I considered, the low tension on the right track, why, I gave it no further thought; it was going right.

Mr. Williams: Q. Now, how did that sum of \$320,000 or \$360,000 per year from the Cadillac Company, which you had in prospect, compare with all of the business you ever had done or thought of doing in the low tension prior to that time?

A Oh, well, the low tension had not developed into anything. It was, as it were, in the experimental stage. The Harvester began ordering, I think, in thousand lots, and

their price was in the neighborhood of nine dollars or ten dollars a piece, as I remember it.

Q Now, you say that this magneto was moved to Tiffin, and a factory installed, and equipped, and so on. Was there any movement of the factory of the Webster Manufacturing Company, in so far as it was engaged in the manufacture of these other lines, that is, the conveying machinery and elevator machinery and gasoline engines, and so on?

A Well, about this time we built a malleable iron foundry in Tiffin, and then about two years afterwards we moved the whole plant there. I think the plant was moved there in 1911.

Q Did you continue actively in or at the head of the Webster Manufacturing Company from 1909 on?

A Until 1913 or 1914, I think it was we—

Q Until then?

A Until then, yes.

Q Was that business as successful, in so far at least as you personally were concerned, and your interests in it, following 1909, as it had been for the 30 or 35 years prior to that time?

A Oh, we lost a good deal of money in Chicago here, when we divided our plant, part of it being in Chicago, and part of it in Tiffin. We had some very hard years, and lost a good deal of money.

Q To what extent did those difficulties absorb your attention at that time?

A Entirely.

Q In what way?

A Well, I of course was right on the job all the while, and my mind was on that—

Q Well, were you distressed or worried, or satisfied, or—

A Oh, no, I was of course worried and perplexed all the while.

Q Now, from 1909 on, will you name some of the concerns with which you have been actively identified?

A Do you mean from 1909 on to when?

Q Down to the present time.

A Well, we first had the Tiffin Malleable Iron Company, of which I was President. Then that was absorbed by the Webster Manufacturing Company. Then I formed the Webster Electric Company, entirely separate from the Webster Manufacturing Company, somewhere in those dates, and the Webster Manufacturing Company of course owned a large

block of their stock. Then I think it was in 1913 or 1914 I sold out all my active interest in the Webster Company.

Q Which Webster Company?

A The Webster Manufacturing Company.

Q That is the elevator and gasoline and—

A Elevator and conveying.

Q And engine company?

A And I then—Do you want the balance of the history?

Q Yes, to show what has been occupying your attention during this period of years.

A Well, after I retired from the active business of the Webster Manufacturing Company I interested myself in the Pfanstiehl Company, a company that manufactures rare metals and tungsten, makes tungsten points; and I was very much interested in that, actively interested in that for two or three years, and last year, last December a year ago, I took a very active interest and bought into the Amalgamated Machinery Company, of Chicago, who were making tools for making big machines for making munitions, that is, we were making machines for making shells, and selling them to such concerns as the Westinghouse, the Detroit Shell, and Winslow Brothers; we furnished all those shops; and then in the early winter the Government was unable to get machines for making, or was unable to get gun boring machines. There was a very tremendous demand for guns, big guns.

Q How big?

A Oh, guns having a barrel of forty-five feet. And the result was that the Government was right up against it; it did not have any—absolutely could not get any planing capacity for planing these long gun boring machines. So we furnished the American Bridge Company, we furnished the Watertown Arsenal; we furnished the Erie Forge; and we furnished the Navy Department; and in order to do that we built four planers, 184 feet long, in the middle of the winter, and accomplished a very remarkable feat of engineering. In other words, we were enabled to deliver these machines in time to help the Government out. That has been my work during the last year.

Q You have been connected during this interval with the Webster Engineering Company, a separate corporation?

A Yes.

Q What, very briefly, was its business?

A That was a business that I started to establish for my

son, Towner; we continued that for a time. I might say
520 that at the same time I organized the American Steam
Conveyor Corporation, for handling ashes, and that sort
of work, on which we had a very nice business. I was Presi-
dent of that for about a year or a year and a half.

Q And devoting yourself actively to its affairs?

A Yes.

Q Practically all of your business time?

A Yes.

Q Now, the Klix Manufacturing Company, have you been
connected with that?

A Yes.

Q In any way?

A But not in any active way.

Q Did you promote or organize that concern?

A Some of my friends got together—

Q Or were you interested in so doing?

A Yes. Invested a little money in it.

Q Now, are you now active at all in the management of
the Webster Electric Company, that is, in such a way as
would require you to devote all of your time or a certain
part of your time every week or every month?

A I am not.

Q To its affairs? How long since you have been thus
actively connected with the Webster Electric Company?

A Oh, I should say, I should guess three or four years.

Q And before that time, that is, before 1915, say, had you
or had you not devoted all or the bulk of your time to the
affairs of the Webster Electric Company for several years?

A I had not.

Q Have you ever devoted the bulk of your time to its
affairs?

A No, sir.

521 Q John L. Milton has been referred to as engineer
or chief engineer. Will you state whether or not he had
that title when he was connected with the Webster Com-
pany?

A I don't think he had that title.

Q What was his relationship with that concern? Was
it that of inventor, or of engineer, or of manufacturer or
what?

Mr. Bulkley: I object to that as leading.

A Oh, as inventor. He was with us as inventor. It was
a sort of family affair and we were trying to work it up.

Mr. Williams: Q You were asked during your cross examination as to some ignition system having a little coil on the spark plugs. Is that the same as this high tension machine in which the Cadillac Company became interested?

A No, that was something entirely different.

Q Did you have a salary from the Webster Manufacturing Company; do you now or have you had for a considerable period of years?

A No, I have had no salary.

Mr. Williams: That is all.

Recross Examination by Mr. Bulkley.

Q You referred to getting your first jolt from Mr. Milton?

A Yes, sir.

Q What do you mean by that?

A I think that is a proper English word.

Q What did you refer to as being a jolt, which you got from him; your first jolt, what was it?

A That is when I said he did not go across country with me, is that it?

Q And told you he was ill, you say?

A Yes, sir.

Q Is that what you mean?

522 A Yes, sir.

Q Explain what you mean by the jolt?

A I think he should have—as the inventor, he ought to have gone with that machine. I think he was entirely well enough to do so and I was greatly distressed that he did not do it.

Q Wasn't there some trouble about your being able to make deliveries under this contract with the Cadillac Company?

A Oh, yes. We could not make the deliveries.

Q Why not?

A We could not make any machines.

Q Did you have the plant in readiness so that you could make them?

A Yes, sir.

Q When was it proved that you could not make those machines successfully?

A Why, at that time.

Q And make them work?

A At that time.

Q At the time you showed it to the Cadillac Company?

A No.

Q One moment. Let me finish my question. At the time you showed it to the Cadillac Company and they gave you their order on some demonstration, was it proved then that it could not be made?

A Why, of course not.

Q Yes.

A But we had only made it by hand at that time.

Q Did you make a demonstration to anybody connected with the Cadillac Company of this high tension magneto?

A Yes, sir.

Q Before you got the contract?

523 A Yes, sir.

Q And that is the instance when you say you went out in the car and that you didn't believe Mr. Milton was sick, and he ought to have been there; is that the time you refer to?

A That is one of the times.

Q How soon after that was it that they gave the order?

A I should think it was within a very few days.

Q Yes. Who was there representing the Cadillac Company at the time of making that test?

A Oh, Mr. Leland and Mr. Sweet.

Q Were they satisfied that it was a successful thing?

A They were entirely satisfied, apparently; they gave the order.

Q When did you learn it was not a satisfactory thing after that?

A When we got our plant going and were trying to make it; I would say it was six weeks.

Q What was the matter with it?

A Why, you will have to find some one to tell me that.

Q You don't know?

A No.

Q Didn't you hear what was said about its unsatisfactoriness, the cause of it being unsatisfactory?

A No, I don't think anybody ever really knew what was the matter.

Q Didn't you ever hear what was the matter with it?

A It is like a man who is sick, a dozen doctors will say he has a stomach ache, or appendicitis, or whatever it may be.

Q Did you ever hear any of your engineers saying anything with reference to what it was that rendered it subsequently unsatisfactory?

* * * * *

524 A I have never found out to this day what was the matter; and I spent money and time and everything to find out.

Mr. Bulkley: Q Who told you at any time that it was unsatisfactory?

A Why, Mr. Sweet came down, the chief engineer, and Mr. Leland, president of the company, came down—

Q What company is that with which he was connected?

A The Cadillac Company. He was chief engineer of the Cadillac Company. Mr. Leland himself came down and we did everything humanly possible to make it go, of course.

Q Do you know that?

A Yes, I know it.

Q You were familiar enough with what was done and the trouble to know that you did everything that was possible to make—

A I didn't say that.

Q Wait until I ask the question.

The Witness: All right now; what is it?

Mr. Bulkley: Read the question.

(Question read as follows: 'You were familiar enough with what was done and the trouble to know that you did everything that was possible to make that'—)

Mr. Bulkley: —work?

A I can't answer the question in the way you put it.

Q Answer it in your own way.

A I told you I didn't know anything about it, but I tried to find out what the trouble was.

Q Answer it.

A I didn't know what was the trouble. I used every method possible to find out because there was—

Q What method did you use to find out?

A Mr. Leland loaned me all of his forces and I went and got Mr. Kempster Miller here, of Chicago, who was considered one of the best electricians in the United States, to
525 come down with his assistant, and we paid him big sums, and Mr. Leland brought down Kettering, of the Deleo people, down there, whom he considered the best electrician he could get hold of, and we used every method in our power, because they wanted the magnetos and we wanted to supply them with them.

Q And you never learned what the trouble with it was?

A No, I don't know today what the trouble was, and I don't think that anybody knows.

Q Didn't Mr. Milton strenuously oppose your going to Tiffin?

A I don't know whether he did or not.

Q You don't remember about that?

A It wouldn't make any difference whether he did or not.

Q I am not asking you to argue the question, sir.

A I don't know whether he did. But if he did it made no impression on my mind.

Q Didn't he tell you—to refresh your recollection—that you ought not to go to Tiffin, a little place like that, to manufacture these instruments?

A I don't think so. I don't remember it at all.

Q Wasn't there a little strained relation arose between you and Mr. Milton because of your insistence upon going down there?

A None that I remember of.

Q Don't you remember that you didn't want to do many of the things which he asked you to do?

A I don't remember that.

Mr. Bulkley: That is all.

Mr. Williams: We offer in evidence the patents in suit as alleged in the bill, and ask that they be marked as Plaintiff's Exhibit No. 20. Those copies, I believe your Honor has in a folder.

The Court: You mean also the one in the supplemental bill?

526 Mr. Williams: Yes, the Kane patent and the nine Podlesak patents.

(Said documents were then received in evidence, marked Plaintiff's Exhibit No. 20.)

HENRY J. PODLESAK, called as a witness on behalf of the plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 50 years, residence Chicago, Illinois; consulting engineer. Has had business relations with the Webster Electric Company and its predecessors, the first of which was when Mr. Webster obtained an option for a license under an application which the witness and his brother had jointly pending in the Patent Office. The witness was then asked the following question:

“What were the circumstances leading to the taking of that option?”

This question was objected to by defendants' counsel upon the ground that the contracts in evidence and in issue in this case were free from ambiguity, and that the circumstances leading up to them were therefore irrelevant and immaterial; and that if the purpose of the question was to introduce evidence of such circumstances for any other purpose it was immaterial. After hearing argument of counsel the objection was sustained, with exceptions to plaintiff, and the witness withdrawn from the stand.

H. R. VANDEVENTER, called as a witness on behalf of the plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 41, residence, Newark, New Jersey; occupation, 527 engineer; connected with the Splitdorf Electrical Company of Newark as engineer. Formerly connected with the defendant, Sumter Electrical Company of Sumter, South Carolina, up to the time of its dissolution, the exact date of which the witness did not remember. Had been connected with the Sumter Company and its predecessors since 1905. Witness did general engineering work for the Sumter Company and its predecessors and for a time was treasurer and general manager of the Sumter Electrical Company. Also had something to do with its patents and was familiar with what the Sumter Electrical Company got out in the way of sales and advertising literature up to the time when the sales end of the business was taken over in Chicago in 1913 or 1914 by the Sumter Electrical Company of Chicago, which was a separate corporation and with which the witness had no direct connection. Mr. F. C. Manning was the president of the Chicago Company. He had been previously connected with the Sumter Electrical Company of South Carolina as vice-president, and prior to that with its predecessor in business, the Sumter Telephone Manufacturing Company, also as vice-president. Witness frequently came to Chicago to talk about the magnetos for which Mr. Manning's company was giving the Sumter Electrical Company orders, and at such times had the usual conversation that business people

have about such things. The South Carolina Company joined the Chicago Company to some extent in getting out advertising literature. With reference to Mr. Manning's coming to Chicago, witness testified as follows:

"Q Did you have any talk with Mr. Manning about his coming here before he came?

A Yes.

Q Did you discuss with him the advisability of doing so, of his doing so?

A Why, we talked of South Carolina as quite a long ways off from the market in which to carry a stock of goods, and that that stock should be carried in Chicago, and there 528 was some general talk as to how that should be done and the best ways of doing it; and, finally, I think he decided to come out here and start a sales company; but I don't know—I don't recollect very much about the circumstances that led up to the establishment of a sales company here."

The attention of the witness being called to the booklet subsequently introduced in evidence as Plaintiff's Exhibit No. 21, witness identified it as a catalogue of Sumter magnetos issued in 1915, but was unable to say whether issued by the Sumter Company of South Carolina or the Sumter Company of Chicago. Stated that it appeared to be the first print and was very likely gotten out by the Sumter Company of South Carolina. Witness had read the booklet. Believes he prepared the copy for it.

The attention of the witness being called to another pamphlet subsequently introduced in evidence as Plaintiff's 529 Exhibit No. 22, bearing the name Sumter Electrical Company on its title-page, and asked as to which of the two Sumter Companies this name referred to, said:

"Why, I think this represents—this was published by the Chicago corporation or in their behalf, because after the establishment of the Chicago—the Illinois—corporation, we did no selling, or very little selling, from Sumter. I think these booklets were printed by us from them and sent out."

Witness being shown another pamphlet subsequently introduced in evidence as Plaintiff's Exhibit No. 22, identified it as a booklet put out by the Sumter Telephone Manufacturing Company of Sumter, South Carolina, predecessor in business of Sumter Electrical Company, defendant, and stated that he probably prepared the copy for the booklet, and approved its issue. Thought the booklet was issued in 1911 or 1912, but stated that there were several reprints of it from

time to time and therefore could not state positively when the particular copy submitted to him was printed. It might have been at any time from 1911 until the name of the company was changed in 1913.

At this point counsel entered into a stipulation that certain advertising literature produced by plaintiff's counsel was published and distributed by the defendant, Sumter Electrical Company, and that the paper forming part of this advertising literature bearing the printed mark 'Form 17' was published and distributed in the year 1910. This paper was introduced in evidence as Plaintiff's Exhibit No. 23. The stipulation then continued as follows:

"Mr. Williams: That the one marked 'Sumter Magnetos for Stationary and Marine Engines, Catalogue No. 14' was published and distributed in the year 1914; and I ask that that be marked Plaintiff's Exhibit No. 24. Let me withdraw that

one, and my offer of it, for a moment, and in lieu of that 530 substitute this: That the booklet entitled 'Ignition Hand Book, Copyright 1911', was published and distributed in 1911; and I ask that that be marked Plaintiff's Exhibit No. 24.

(The said document was thereupon marked as Plaintiff's Exhibit No. 24.)

Mr. Williams: That the booklet entitled 'The Magneto Hand Book. Facts About Magnetos for Stationary Engines', was thus published and distributed, there being, however, no stipulation as to the date of publication or distribution. That we ask to have marked as Plaintiff's Exhibit No. 25.

(The said document was thereupon marked as Plaintiff's Exhibit 25.)

Mr. Williams: That the booklet entitled 'The Magneto Hand Book, Copyright 1913', was thus published and distributed in 1913; and we ask that that be marked Plaintiff's Exhibit No. 26.

(The said document was thereupon marked as Plaintiff's Exhibit 26.)

Mr. Williams: That the booklet entitled 'Sumter Magnetos, Catalogue No. 14', was thus published and distributed in 1914; and we ask that that be marked Plaintiff's Exhibit No. 27.

(The said document was thereupon marked as Plaintiff's Exhibit 27.)

Mr. Williams: That the booklet entitled "High and Low Tension Sumter Magnetos, Form 51", was thus published and

distributed in February, 1914; and we ask that that be marked as Plaintiff's Exhibit No. 28.

(The said document was thereupon marked as Plaintiff's Exhibit 28.)

531 Mr. Williams: That the booklet entitled 'Form 57, Second Reprint', was thus published and distributed in December, 1914; and we ask that that be marked Plaintiff's Exhibit No. 29.

(The said document was thereupon marked as Plaintiff's Exhibit 29.)

Mr. Williams: That the booklet with the printed date, January, 1915, was thus published and distributed in January, 1915; and we ask that that be marked as Plaintiff's Exhibit No. 30.

(The said document was thereupon marked as Plaintiff's Exhibit 30.)

Mr. Williams: That the booklet entitled 'Sumter Plug Oscillator', was thus published and distributed in the early part of 1915; and we ask that that be marked as Plaintiff's Exhibit No. 31.

(The said document was thereupon marked as Plaintiff's Exhibit 31.)

Mr. Williams: That the folder entitled 'Form 56' was thus published and distributed in July, 1914; and we ask that that be marked Plaintiff's Exhibit No. 32.

(The said document was thereupon marked as Plaintiff's Exhibit 32.)

Mr. Williams: That the booklet having the printed mark 'No. 76-A' was thus published and distributed in 1918; and we ask that that be marked as Plaintiff's Exhibit No. 33.

(The said document was thereupon marked as Plaintiff's Exhibit 33.)

Mr. Williams: That page 69 of the magazine 'Gas Power' for February, 1915, was inserted and published at the instance of the Sumter Electrical Company, in February, 1915; and we ask that that be marked as Plaintiff's Exhibit No. 34.

532 (The said document was thereupon marked as Plaintiff's Exhibit 34.)

Mr. Williams: That page 69 of the magazine 'Gas Review' was an advertisement published at the instance of Sumter Electrical Company in February, 1915; and we ask that that be marked as Plaintiff's Exhibit No. 35.

(The said document was thereupon marked as Plaintiff's Exhibit 35.)

Mr. Williams: That page 30, or the article relative to 'Sumter Magnetos,' on page 30 of the magazine 'Farm Power' was published in June, 1915, at the instance of the Sumter Electrical Company; and we ask that that be marked as Plaintiff's Exhibit No. 36.

(The said document was thereupon marked as Plaintiff's Exhibit 36.)

Mr. Williams: That the pamphlet entitled 'Mechanical Construction of Ignition Magnetos, by H. R. Van Deventer' was published in June, 1918, by the Society of Automotive Engineers, and that the article appearing therein was prepared by H. R. Van Deventer, with his consent and authority for the benefit of the Sumter Electrical Company; and we ask that it be marked Plaintiff's Exhibit No. 37.

(The said document was thereupon marked Plaintiff's Exhibit 37.)

Mr. Williams: That the paper entitled 'N. G. E. A. Bulletin' was published in October, 1915, and that the article appearing therein, entitled 'The Magneto of the Future' was prepared by F. D. Williams, one of the salesmen of the defendant, Sumter Electrical Company, and that the article was published under his authority and with his consent.
533 We ask that it be marked Plaintiff's Exhibit No. 38.

(The said document was thereupon marked Plaintiff's Exhibit 38.)

Mr. Williams: That the bulletin marked 'Bulletin H, 188 F,' was published and distributed in 1918, by Fairbanks, Morse & Company, and that the ignition equipment described and referred to therein was ignition equipment furnished by the defendant, Splitdorf Electrical Company, one of the defendants herein, and we ask that it be marked Plaintiff's Exhibit 39.

(The said document was thereupon marked as Plaintiff's Exhibit 39.)

Mr. Williams: That the booklet marked '1915, Sumter Magnetos, Catalogue No. 15,' was published and distributed by Sumter Electrical Company, the defendant herein, early in 1915, and we ask that it be marked Plaintiff's Exhibit No. 40.

(The said document was thereupon marked as Plaintiff's Exhibit 40.)

Mr. Williams: That the booklet marked '1915, Sumter Magnetos, Catalogue No. 15,' First Re-print', was published and distributed in the fall of 1915 by Sumter Electrical Com-

pany, the defendant herein; and we ask that it be marked Plaintiff's Exhibit No. 41.

(The said document was thereupon marked as Plaintiff's Exhibit 41.)

Thereupon the witness H. R. Van Deventer resumed the stand and his direct examination was continued by Mr. Williams, as follows:

"Q Now, Mr. Van Deventer, as to this booklet, Plaintiff's Exhibit No. 27, will you state whether or not that was printed at the instance of the Sumter Electrical Company of South Carolina? (Exhibit 27 shown to the witness.)

534 A Yes; there is a mistake on page 15 of that bulletin; and it was never circulated, and that edition was supposed to have been destroyed, and was in fact destroyed, so far as we were able to destroy it. That is why we objected to putting it in.

Q That is, the mistake was on this page reading as follows:

'Oscillating magnetos.'—containing three cuts, and reading as follows:

'We furnish a full line of oscillators adapted to every size of engine, and of the same proven construction as our rotary types. Note that all armature cores are laminated, and shafts are fitted into the head, thus eliminating electrical disadvantages of the cheaper construction, where the shaft passes through the laminations. On engines adapted for oscillators the Sumter line is ideal for easy starting and running. The springs are made from the best vanadium steel, which costs from three to four times as much as the ordinary spring wire commonly furnished. Spring rollers are hardened.

'Sumter oscillators are offered to those who desire the very best of this type obtainable, and are superior in construction and performance to any oscillator now offered, and particularly to that class of oscillators with which the market is now flooded in an attempt to cater to the demand for a cheap magneto for small engines.

'Sumter oscillators comprise the magneto only as shown on pages 16 and 17, or, on quantity orders can be furnished complete with igniter, as shown by cuts on this page. Igniters may have N. G. E. A. standard electrode, drop forged parts, and comprise the complete ignition outfit for the engine, ready to mount.'

Is that the matter in which the mistake occurred, as you say?

A No. The mistake is in the cuts. Through some
535 error there was a cut made of an apparatus which we
never manufactured; in fact I think there was only one
of them made, and I doubt if that was operated.

Q Which cut?

A All three of the cuts shown on that page.

Q Are those cuts, all of them, of the same identical machine, or of different machines?

A That is the same machine.

Q Three cuts of the same machine?

A Yes, sir.

Q Who did manufacture that machine?

A Nobody.

Q Now, wherein lay the mistake in this matter?

A Why, when the cuts were made for the page, that page of advertising matter, the wrong machine was probably photographed, or some mistake of that kind was made. That was an experimental model, and was never manufactured, and never sold.

Q Now, will you say that none of these booklets like Plaintiff's Exhibit No. 27 were distributed?

A Not knowingly. If they were, it was through inadvertence and mistake in sending them out. We used a good many of them, and tore the pages out of them.

Q Can you say whether this identical Plaintiff's Exhibit 27 was furnished by the Sumter Company or its agents to Ira H. Waite, the agent or representative of the International Harvester Company at Kansas City?

A I could not say.

Q Were any copies identical with this Plaintiff's Exhibit No. 27 thus furnished to him?

A I could not say that, Mr. Williams.

Q Can you testify that they were not thus furnished to him in 1914?

536 A No, I could not. The advertising department might have sent out a hundred of those things inadvertently. I could not say that none of those were ever distributed to anybody.

Q Who was it stopped the further distribution of them?

A I did.

Q You did that yourself?

A Yes, sir.

Q You looked over these exhibits which I have just been offering, with me, during the noon recess, did you not?

A Yes, sir.

Q You identify this Plaintiff's Exhibit No. 24, do you not, as matter gotten out by the Sumter Company after having prepared by you in 1911?

(Plaintiff's Exhibit 24 shown to witness.)

A Yes, sir.

Q And you identify this Plaintiff's Exhibit No. 26, booklet, as having thus been gotten out in 1913, do you not?

(Plaintiff's Exhibit 26 shown to witness.)

A Yes, sir.

Q Now, this other booklet, marked Plaintiff's Exhibit No. 25, as I understand you, you are unable to say when that was published and distributed?

A Yes, sir.

Q Can you say whether that was published and distributed at a date intervening between the dates at which this 1911 book, Plaintiff's Exhibit No. 24, and the 1913 book, Plaintiff's Exhibit No. 26, were published and distributed?

A No, sir, I could not say.

Q Now, in connection with that matter of the dates of publication of these booklets, let me call your attention to pages 46 to 53, and ask you whether you find upon those pages a several pages description, and a considerable number of 537 cuts illustrative of an oscillating type of magneto at that time manufactured and offered for sale by the Sumter Company, this booklet to which I am referring you being Plaintiff's Exhibit No. 24.

(Plaintiff's Exhibit 24 shown to witness.)

A Yes, sir, that is a description of one type of machine that was manufactured at that time.

Q How many pages are there in that booklet devoted to the exploitation of that machine?

A Seven.

Q Now, in this booklet marked Plaintiff's Exhibit No. 25, do you find on page 43 the following:

'Oscillating magnetos. We furnish a full line of this type formerly so popular, but wish to state that owing to the high efficiency of our standard rotary types, and the fact that we can meet every requirement with the rotary machine, the oscillators are no longer necessary, nor are they desirable, owing to certain inherent disadvantages not possessed by rotary machines. Figure 18 shows front and side views of our single spring oscillator, type B. V., a very popular machine

possessing all of the Sumter features, and including a special bearing arrangement, special lubricators, etc. We can accomplish starting from a standstill, with the rotary magneto, and fulfill any other conditions for which an oscillator has heretofore been considered necessary. While we furnish a machine of the oscillating type equal if not superior to anything on the market, we suggest that manufacturers correspond with us with a view to adopting the more simple and efficient rotary type.'

Mr. Bulkley: That is objected to, as immaterial and irrelevant.

The Court: It may be received, subject to the objection.

538 Mr. Williams: Q The question is whether you find that matter there.

A I do.

Q Now, do you find anything else in this booklet, Plaintiff's Exhibit No. 25, aside from the cut which accompanies the reading matter which I have read, and referring to oscillating magnetos?

Mr. Bulkley: The same objection.

The Court: You may answer.

A No, I do not. At that time I believe we got out—

Mr. Williams: Q Well, you have answered the question. Now, do you find, in this Plaintiff's Exhibit No. 26, which was gotten out in 1913, the following on page 35, relative to oscillating magnetos, and so entitled:

'We furnish a full line of this type formerly so popular, but wish to state that owing to the high efficiency of our standard rotary types, and the fact that we can meet every requirement with a rotary machine, oscillators are no longer so desirable, as they have certain inherent disadvantages not possessed by rotary machines.

'We will be pleased to correspond with manufacturers now using oscillators, who desire to change to the more simple and efficient rotary type;'

And further: 'We can accomplish starting from a standstill with the rotary magneto, and fulfill any other conditions for which an oscillator has heretofore been considered necessary. We do not recommend oscillators, and while we furnish a machine of this type equal, if not superior to anything on the market, we do not recommend same?'

Mr. Bulkley: The same objection.

The Court: He may answer.

Mr. Williams: Q Do you find that matter on this page, as I have indicated?

539 (Plaintiff's Exhibit 26 shown witness.)

A I do.

Q Now, do you find, in this last booklet, Plaintiff's Exhibit No. 26, of 1913, any other matter relative to the oscillating magnetos, or any cuts of oscillating magnetos, of any kind?

A I do not.

Q Now, having called those pages to your attention, and to the fact that the 1911 booklet devotes some several pages to the exploitation of oscillating magnetos, and the fact that the 1913 booklet devotes absolutely nothing more to the subject of oscillating magnetos than that which I have read to you from page 35, and in which it is stated that you do not recommend oscillating machines, are you enabled now to state, in view of the fact that this Plaintiff's Exhibit No. 25, which has an intermediate amount of matter relative to oscillating machines, and which is neither so strong in its commendation and exploitation of oscillating machines as is the 1911 book, but which, on the other hand, does not condemn oscillating machines to the extent that the 1913 book condemns them,—can you state whether or not this Plaintiff's Exhibit No. 25 was not published and distributed at a date intervening between the dates of the 1911 book and the 1913 book.

Mr. Peaks: I object to the question.

The Court: I think he may answer that. It is a question of a date, merely whether his recollection is refreshed, so that he can testify to a date. Are you able to do that?

A No, sir.

Mr. Williams: Q Is it not a fact that the Sumter Company's exploitation of oscillating machines diminished between say 1911 and 1913?

A No, I think it increased. The reason why this variation in the statements in these booklets is concerned, is this: The booklets were put out for general distribution—

Q Well, I think you have answered my question, Mr. 540 Van Deventer. You say that the exploitation of oscillating machines during 1911 and 1913, from 1911 to 1913, by the Sumter Company increased?

A I believe so.

Q Now, did you prepare the copy for this which I will quote from page 6 of the February, 1914 booklet, Plaintiff's Exhibit No. 28:

'Oscillating and self-starting magnetos.

'We formerly furnished a full line of oscillating magnetos, but wish to state that owing to the high efficiency of our standard rotary types, and the fact that we can meet every requirement with the rotary machine, oscillators are no longer necessary, nor desirable, owing to certain inherent disadvantages.

'Among these disadvantages may be mentioned the use of spiral springs. As every mechanic knows, it is impossible to operate a spring of this type continuously without breakage. Other defects are high voltage, the difficulty in keeping the timing in proper adjustment, and in taking care of the advance and retard. The necessary drive is complicated, and expensive.

'As to the self starting feature, some time ago we developed a self-starting magneto, wherein the trip-lever was locked back against the tension of the springs, and then fired by releasing same. We patented this feature, and some of the machines now offered, for which claims of novelty are being made, we consider infringements of this patent. We did not offer a machine of this type to our customers, because we consider it inherently defective, and although we manufactured same, and it proved more satisfactory than any similar machine on the market, we could foresee where it would not give the same uninterrupted service as the standard rotary types for the rotary engine.'

Was the copy for that matter prepared by you for this pamphlet of February, 1914?

(Plaintiff's Exhibit No. 28 shown witness.)

541 Mr. Bulkley: The same objection.

The Court: The same ruling.

A Yes.

Mr. Williams: Q Now, does that, the publication of that matter in this pamphlet of 1914, refresh your recollection as to the fact of whether the Sumter Company lessened and practically abandoned its efforts to sell oscillating types of magnetos between 1911 and say February, 1914?

A If you will permit me to answer the question in my own way, I can answer it intelligently.

Q Well, I am asking you whether this matter which I have just read refreshes your recollection upon that point.

A We did not abandon the manufacture of oscillating magnetos. I think we made more, as time went on. But we did not wish to advertise them generally to the trade, because we found that very few people at that time were ready to use an oscillating equipment.

Q And so in your advertising matter you condemned that; is that the fact?

A We did not exactly condemn them. We recommended what in our own opinion as engineers we thought would be the best.

A And this is typical of the advertising matter which you got out during these several years, is it?

A These exhibits?

Q Yes.

A Yes, sir.

Q To whom did you sell those oscillating equipments, in 1913?

A I think we sold them to the Otto Gas Engine Company.

Q Anyone else?

A I do not recollect. I did not have charge of the sales. Mr. Williams: That is all.

542

Cross-Examination by Mr. Bulkley.

Q Mr. Van Deventer, when the Sumter Company started business, what did they then make and sell?

A Telephone apparatus.

Q How long did they continue making telephone apparatus?

A Well,—

Q And was it telephone apparatus exclusively which they made and sold, at the outset of their career?

A Well, in 1905, when I came with them, it was exclusively telephone apparatus. They made some special equipment for the United States Government, and later on they made gun-firing magnetos.

Q What was the reason for the Sumter Company taking on the manufacture of magnetos, and about when was it that they started manufacturing magnetos?

A In about 1907 the Western Electric Company went on the market, with their telephone apparatus, and it seriously affected the business of the Sumter Company, and they started to look around for some other line of manufacture, and they took up and considered several matters, and as they had made a great many magnetos, they thought that would be a good business to go into, and they started to go into it.

Q Now, you said, upon your cross-examination, with reference to this lessening or increasing of the sales of magnetos of particular types, that you had some explanation to make. Will you go on and make that explanation?

A Well, in regard to the business from 1910 until 1914 or 1915, we were pretty far away from the gas engine factories. We had to get a line on what they wanted; and we found out that the oscillating magneto business required practically a special type for every manufacturer,—what we were then making,—and we did not advertise that kind of magneto extensively, because we did not want to stir up any more of that kind of business at that time than we 543 were able to handle; we preferred to sell the machines that we were tooled up and had ready for manufacture, and which for the majority of purposes and on the majority of engines we considered superior to the other type.

Mr. Bulkley: That is all.

Redirect Examination by Mr. Williams.

Witness was shown Plaintiff's Exhibit Defendants' machine Type B, and asked whether machines identical or substantially identical with the exhibit were made prior to August 3, 1915, to which witness replied that "There were machines made prior to that date of that general type, but that is not one of them."

Witness was then shown the two booklets Plaintiff's Exhibits Nos. 40 and 41, and asked if he could say whether the apparatus shown in the cut in Exhibit 41 was manufactured and sold prior to August 3, 1915, to which witness replied:

"I cannot say as to the month and date. I can give you that exactly, if you will let me consult my records. It was some time in 1915, but I do not recollect the date."

Witness was then given permission to consult his memorandum, and stated that devices such as those inquired about were manufactured and sold or offered for sale prior to August 3, 1915. Witness was then asked wherein the equipment exemplified in Plaintiff's Exhibit Defendants' machine Type B differed from that illustrated on pages 37 to 43 of Plaintiff's Exhibit No. 41, and replied:

"Well, there are a great many differences."

Witness then offered to produce one of the machines illustrated in the booklet Exhibit No. 41, and it was agreed that this should be done.

Plaintiff's counsel thereupon offered in evidence as Plaintiff's Exhibit No. 42 certified copies of certain of the pleadings and proceedings in the matter of Emil Podlesak, 544 Henry J. Podlesak and Webster Electric Company, plaintiffs, vs. Sumter Electrical Company, defendant, in a

suit in the United States District Court for the Eastern District of South Carolina, under reissued Letters Patent No. 13,878. Objected to by counsel for defendant. Objection overruled.

EMIL PODLESAK, called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 43; occupation, manufacturer. One of the defendants. Present throughout the trial and heard the testimony relative to Plaintiff's Exhibit No. 12 machine. Went to work for Webster Electric Company or its predecessor August 10, 1909, and moved to Tiffin, Ohio shortly afterward. Continued in the employ of the Webster Company for some time after that and was familiar with what it was manufacturing. At the time he began to work for the company it was manufacturing a machine which "outside of some mechanical, perhaps some details in there," was the same as Plaintiff's Exhibit No. 12. Continued to make such machines until about the middle of 1912. The Webster Company made the generators of the machines like Plaintiff's Exhibit No. 12 and supplied such generators to the International Harvester Company, and witness knew that such generators were to be mounted upon a plug and bracket and support such as that in Plaintiff's No. 12, and frequently saw such generators after they had been combined with the remaining parts of Plaintiff's Exhibit 12 by the International Harvester Company and put into use.

Plaintiff's counsel submitted to the witness a piece of apparatus subsequently offered in evidence as Plaintiff's Exhibit No. 43, and witness identified it as "an outfit for apparently a three-horse power International Harvester 545 vertical engine" manufactured by Webster Electrical Company, with which manufacture witness was connected. Being asked whether he was responsible for the substitution of Plaintiff's Exhibit No. 43 machine for Plaintiff's Exhibit No. 12 machine, in so far as the product of the Webster Company was concerned, witness said:

"Well, I developed the apparatus," and further stated that it was a part of his work while he remained with the Webster Company, under various contracts until 1915.

Asked if he could state approximately the number of these low tension ignition equipments manufactured and sold by the Webster Company during 1909 and subsequent years, witness stated that he did not know as to 1909; that in 1910 they made quite a good many, but witness could not say how many; that to the best of his recollection in 1910 and 1911 and part of 1912 "there may have been as many as 10,000, eight to ten thousand," altogether. Asked as to how many of these low tension equipments were sold in 1912 altogether, witness said he could not remember and could only make a guess at it. Asked if he knew what royalties he and his brother received during any of the years prior to that, or what in a general way they amounted to, witness stated he could not tell. Further examination along the same line objected to upon the ground that the plaintiff could secure accurate information from its own books, whereupon examination was discontinued.

No cross-examination.

Cross-Examination by Mr. Thompson.

Counsel for Emil and Henry Podlesak.

"Q At the time you entered the employ of the predecessor corporation, did you have a contract with them?

A I made a contract on August 10, 1909, yes, sir.

Q Was that contract in writing?

A Yes, sir.

546 Q I will ask you to produce that contract, if you have it here."

Here ensued a discussion between counsel and the Court regarding the introduction at this point of the Podlesak contracts identified as Exhibits 1, 2 and 3, including the following:

Mr. Thompson: "Then it will be admitted that Mr. Podlesak's employment, commencing August 10, 1909, down to May 14, 1915, was under exhibits—

The Court: 1, 2 and 3.

Mr. Thompson: 1, 2 and 3, of the answer of the defendant Tesla Emil Podlesak, in this case, will it?

Mr. Williams: May 4th is the date, is it not, instead of May 14th?

Mr. Thompson: May 14th.

The Witness: The 14th.

Mr. Thompson: May 14th?

A Yes, sir.

Mr. Williams: Is there any point in the difference between May 4th and 14th? I am quite sure the date is May 4th. Are you making a point of the fact that it was May 14th?

Mr. Thompson: I make a point that his employment actually terminated on May 14th.

Mr. Williams: What is the fact?

The Court: Q Do you know?

A I beg pardon.

Q When did you quit?

A I did not quit. I was discharged on May 14th.

Q Well, when did you stop going there?

A May 14th.

Mr. Williams: The point is, he resigned on May 4th, and the resignation, I believe, was accepted. That is why I am uncertain about it.

The Court: Q What do you say? Your date is the 14th, is it?

A Yes, sir.

Mr. Thompson: Q You went to work on what date, Mr. Podlesak?

A I signed this contract, I signed the first contract, on August 10, 1909. I went back to New Jersey, and packed my things, and actually started work on August 30, 1909.

Q And how long did you work under this first contract of August 10, 1909, for the predecessor of the present plaintiff?

A Until about April 1, 1910.

Q And then what happened?

A Then there was a new contract discussed, and that new contract was reduced to writing on May 18, 1910.

Q And on and after May 18, 1910, what did you do?

A I worked under that contract until a new contract was executed in March of 1913; I do not remember the exact date.

The Court: March 3rd.

Mr. Thompson: March 3rd.

Q And I will ask you, Mr. Podlesak, whether after May 18th, 1910, you worked at all under this old contract of August 10, 1909.

A No, sir.

Q And after March 3, 1913, did you work at all under either the contract of August 10, 1909, or the contract of May 18, 1910?

A No, sir.

Q And you state that you continued in the employ of the Webster Electric Company up to May 14, 1915?

A Yes, sir.

Q That is correct?

A Yes.

Q And after May 14, 1915, were you in the employ of the Webster Electric Company in any capacity whatever?

548 A No, sir.

Mr. Thompson: That is all.

Redirect Examination by Mr. Williams.

Q When did you become an officer of the Webster Electric Company? In March, 1912?

Objected to, objection overruled.

A I think it was in March; it was in 1912, I think it was in March, 1912.

Mr. Williams: Did you become a director at the same time?

Same objection and same ruling.

A Well, I had a letter from Mr. Loeb, telling me that I was elected secretary, and I presume that made me a director.

Mr. Williams: Q Well, you were a director for several years before 1915, weren't you?

A Some years, yes, sir.

Recross Examination by Mr. Peaks.

Q Mr. Podlesak, when did you cease to have any connection with the Webster Electric Company whatsoever?

A Well,—

The Court: Q When you sold out the patents?

Mr. Peaks: Well, I do not know. We were content to let it rest, when he says he was discharged, but Mr. Williams has been showing that he held some offices, in addition to his employment.

The Court: Of course these contracts were still in force, and he was collecting royalty.

Mr. Peaks: Q Well, were you an officer or director or employee of the Webster Electric Company, at the time you made your first contract with either the Splitdorf or the Sumter Company? You can answer that question yes

549 or no.

A When I made the contract with the Splitdorf Company?

Q Yes.

A No, sir, I was not.

Q Or with the Sumter Company?

A Or with the Sumter Company.

Q Either one?

A I was not connected with the Webster Company in any way, when I made those contracts.

Q How long had you been free from any service with them as an officer or a director or an employee, at that time?

Mr. Williams: Will you read that question, please?

(Pending question read.)

Mr. Peaks: Approximately?

A There was a stockholders meeting shortly after I was discharged, and the only thing that was said was that some other fellows were elected to the directorate, and that was all the notice I got, and I thought that was enough.

Q Well, how long after you quit was that, if you know?

A Oh, it was right shortly after that. I do not—

Q Well, you had not been an officer or director of the Webster Electric Company, then, for some months, at the time you made your first contract with either of the defendant companies; is that right?

A That is right.

Q That is all.

A I had not been for some little time. Yes, sir.

Redirect Examination by Mr. Williams.

Q You were secretary, and a director of the Company, the Webster Electric Company, on February 5th, 1914, were you not?

550 Objected to, and objection sustained, subject to the right of plaintiff's counsel to go into the matter later if shown to be proper.

Mr. Williams: Q Now, a matter, Mr. Podlesak, which I should have asked you about earlier: You are familiar with the subject matter of E. Podlesak patent No. 1,101,956, are you not, and are the inventor of the subject-matter of that patent?

A Yes, sir.

Q Now, was that invention also developed during the course of your—was that invention made by you during the course of your employment and connection with the Webster Electric Company?

Question objected to on the ground that the matter inquired about had been previously covered. Objection sustained.

Mr. Williams: Your Honor understands, of course, that that subject-matter of that patent 1,101,956 was not in this first machine which the witness identified.

Mr. Gifford: It was a subsequent development.

The Court: Yes, I understand that. I can see it right here.

CHARLES KRATSCH, called as a witness on behalf of the plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Residence, Chicago; occupation, manager of the Sumter division of the Splitdorf Company, Chicago. The Sumter division is the sales organization of the Splitdorf Company, defendant. Witness stated that he had been manager of it since July 1, 1918. Prior to that time he had been employed by the Sumter Electrical Company, the Illinois corporation, since October 1, 1915. Before that by the Sumter Electrical Company of South Carolina. The employment of the witness, in these various connections, had always been in 551 Chicago and always in the same office.

The witness further testified:

"Q Now, what was the business of this Sumter Electrical Company of Illinois?

A Principally a sales organization.

Q For whom?

A For ourselves. We bought products from the Sumter factory of the Splitdorf Company.

Q Did you buy it always from the Splitdorf Company?

A Yes, sir.

Q Did you buy everything that you sold from the Splitdorf Company?

A Yes, sir.

Q Never manufactured anything yourselves?

A Oh, yes, we manufactured some small articles here.

Q What?

A Electrodes and small igniters.

Q What do you mean by electrodes? Electrodes for what?

A The electrode is part of the igniter. It will be perhaps a movable electrode or stationary electrode.

Q I call your attention to this booklet, Plaintiff's Exhibit 21, and ask you whether you are familiar with the apparatus shown and described on pages 37 to 44, inclusive, of that booklet?

A Yes, I know the machine.

Q Wherein does the machine shown on those pages of that booklet differ, if at all, from this Plaintiff's Exhibit Defendants' machine, Type B?

A There is a difference in the length of the plug.

Q What else?

A There may be some other differences. There is a difference in the number of parts, perhaps. I am not at all familiar with that end of it. You have a sample of the other one right over there.

552

Mr. Williams: Q This piece of apparatus which I hand you, is that the thing illustrated on these pages 37 to 44 inclusive of this Plaintiff's Exhibit 41 Booklet?

A Yes, sir.

Mr. Williams: Q You sold equipment, did you, like this which you have just identified?

A Our office sold it, yes, sir.

Mr. Williams: I ask that the apparatus just identified by the witness be marked Plaintiff's Exhibit 44, and as such we offer it in evidence. No, I will ask you to have that marked Plaintiff's Exhibit, Defendants' Machine Type A.

(Said machine was then received in evidence and marked Plaintiff's Exhibit Defendants' Machine Type A.)

Q Now, in selling this equipment Plaintiff's Exhibit Defendants' Machine Type A, it was equipped, was it, with a magneto generator proper, as shown on pages 37 to 44 on this Plaintiff's Exhibit 41, Booklet?

A Yes, sir.

Q You had to do with making those sales yourself, did you not?

A No.

Q You didn't make those sales?

A No.

Q Now, when this equipment Defendants' Machine Type A was installed on an engine, there was a dowel pin, as I understand it, which projected from the engine cylinder cast-

ing and extended into this hole in the arm, which extends laterally from the plug, is that correct?

A Yes, I saw some such.

Q Such equipments were sold to Fairbanks Morse Company with the expectation that they would use that dowel pin extending into this hole in the arm in the manner which

I have described, were they not?

553 A Yes, sir.

Q And thus used by the Fairbanks Company to your knowledge?

A Yes.

Q Now, to hold this equipment to the engine cylinder what was employed? A bolt or clamp, or both or how?

A To the best of my knowledge there was some kind of clamp employed there.

Q Where did that clamp engage or strike? What was the construction?

A I don't know; I am not familiar with it.

Q Did you say you were or you were not familiar with it?

A No, sir, I never understood that apparatus. At the time those were sold I was office manager and had nothing to do with sales.

Q Who had to do with sales?

A Mr. Manning had to do with that.

Q Mr. Manning handled that?

A Yes, sir.

Q Equipment like this Plaintiff's Exhibit Machine Type A were sold to the Fairbanks Morse Company, were they not?

A Yes, sir.

Q Between February 9 and August 3, 1915?

A Yes, sir, I believe they were.

Q Who manufactured the parts shown here in Plaintiff's Exhibit Defendants' Machine Type A?

A I could not identify that at all.

Q This Sumter Company of Illinois that you say you were connected with, in what capacity was that, or in what way?

A I had charge of the account and the Office.

Q That was all of its extent?

A Yes, sir.

Q Never had any further responsibility than that?

554 A Why, I assisted in several capacities in a general way, of course, but that was my principal work.

Q What is your position now?

A I am manager of the Sumter Division of the Splittdorf Company.

Q Were you manager at any time of the Sumter Electrical Company of Illinois?

A No, sir.

Q Did you ever have virtual charge of all its business here in Chicago for a good many months?

A Yes, during the last few months that it was in existence I did have.

Q Were you not sales manager,—or at least a salesman for a good many years before that?

A I was a salesman from 1913 until about two and a half years, or something of that kind.

Q Then what were you?

A Then I took charge of the office.

Q And then became manager?

A Yes, sir.

Q Now, you know, don't you, that the Sumter Company of Illinois had castings made for these supports, or mountings for magnetos?

A Yes, sir.

Q And machined them up, or had them machined here in Chicago?

A Yes, sir.

Q And provided the springs, and made and assembled the complete ignition equipment, as shown in these booklets, with the exception of the magneto and generator itself?

A Yes, sir.

Q That was done for a considerable number of years, was it not?

555 A No, only for a short period.

Q For how long?

A Well, a short time, perhaps—let me see—I might say a year or a year and a half.

Q When was that?

A Dating from about July or August to the present time—1915.

Q From 1915?

A Yes, sir.

Q To the present time?

A Yes, sir.

Q Under whose authority did the Splitdorf Company—no, the Sumter Company of Illinois, buy, as you have said, the magneto generator proper and then combine it with the other parts, that is, the plug or bracket or support and the yoke and the springs around the electrodes and the electrode arms, and so on, to make up the entire equipment as shown in pages 37 to 44 inclusive of Plaintiff's Exhibit 41, Booklet; under whose authority was that done?

A We bought them complete from the Splitdorf Company.

Q Bought what complete?

A Magnetos and plug castings.

Q I thought you said a little bit ago that the Sumter Company of Illinois made or had made here in Chicago these parts, these castings and assembled the parts.

A We did that on order from the Splitdorf Company; we made up the brackets and then purchased them complete from them and we billed them with the manufacturing of the parts which they didn't furnish.

Q Now, I don't understand that at all. There were some parts, you say, that the Splitdorf Company did not furnish you?

A Yes, sir.

556 Q Now, what complete equipment did they not furnish?

A They did not furnish the bracket nor the springs nor the spring pawls; they did not furnish this end of it. They furnished the magneto.

Q That is to say, the Splitdorf Company did not furnish any of the parts of the structure that is shown on Plaintiff's Exhibit Defendants' Exhibit Machine Type A?

A They furnished it. We made it up on order from them. We bought the plug oscillator complete from the Splitdorf Company, and manufactured the other parts on a purchase order given us by the Splitdorf Company.

Q When you say you manufactured it, you mean the Sumter Company, the Sumter Electrical Company of Illinois, did the manufacturing?

A No, we had it made outside.

Q Who had it made outside? The Sumter Company of Illinois?

A We did, yes, sir.

Q Now, you said, if I understood you, you said you bought

that thing which you had made outside, you bought it from the Splitdorf Company?

A Yes.

Q Is that right?

A Yes, we bought it complete from the Splitdorf Company. The Splitdorf Company billed us for the complete job. We charged for the brackets which we assembled and made up under their direction.

Q You sold it to the Splitdorf Company?

A We sold the bracket.

Q You sold the parts constituting the structure in that Defendants' Machine Type A; you sold that?

A Yes.

Q Then the Splitdorf Company put a magneto on it and sold it back to you?

557 A Yes.

Q Where did they put the magneto on, the part that they sold back to you, where did they do that work?

A It was shipped direct from the factory at Sumter, South Carolina, to the customer, and the customer did the assembling.

Q What?

A The customer did the assembling, and put his own magnetos on.

Q What corporation was doing this work down in Sumter, South Carolina?

A I suppose it was the Splitdorf Company corporation; I don't know what the name of that corporation was down there.

Q Let me see if I follow that: It was the Sumter Company of Illinois that made these parts. Plaintiff's Exhibit Defendants Machine Type A; they either made or had those made by parties other than the Splitdorf Company here in Chicago; is that right?

A That is right.

Q And then they sent those parts where; shipped them where?

A Direct to the customer.

Q That is the engine manufactory?

A Yes, sir.

Q And then the engine manufacturer put the magneto on this shelf or bracket?

A Yes, sir.

Q Now, where did he get that magneto proper?

A Shipped to him from the Sumter works at Sumter, South Carolina.

Q That is the Splitdorf Company?

A Yes, sir.

Q Now, did you know, when, as the Sumter Company of Illinois, you shipped these parts, Plaintiff's Exhibit Defendants Machine Type A, to the manufacturer, that he was going to use that magneto generator equipment attached 558 to it in the manner illustrated in Plaintiff's Exhibit 41; did you know that?

A Yes, sir.

Q Under whose authority did this Sumter Company of Illinois Make these parts, Plaintiff's Exhibit Defendants' Machine Type A; where did they get the right to do that; or who authorized their doing it?

A Why, we always had a written purchase order from the Splitdorf Company of Newark, New Jersey.

Q You kept that on hand all the time?

A No, we had an order for every job.

Q That means, does it, that it was the Splitdorf Company who procured the Sumter Company of Illinois to make these things which you have described as having been made by the Sumter Company of Illinois?

A Yes, sir.

Q And then you shipped the parts which you thus made to the engine manufactory?

A Yes, sir.

Q And billed him for them?

A Yes, sir.

Q Now, how long did that arrangement continue? How long was business done in that fashion?

A Up to the time that the Sumter Electrical Company of Illinois was dissolved. That was the first of July, 1918.

Q July 1, 1918, there was some change, and who carried on the business here in Chicago from that date?

A The Splitdorf Electrical Company of Newark, New Jersey.

Q And you are working now for the Splitdorf Company?

A Yes, sir.

Q Doing the same kind of thing you did previously?

A Yes, sir.

559 Q What organization was it, which one of these, the Sumter of South Carolina, the Sumter Company of Illi-

nois, or the Splitdorf Company, who was making and selling this equipment shown on pages 37 to 44 of Plaintiff's Exhibit 41, Booklet, between February 9th and August 3rd, 1915, as you have said? What corporation was making and selling the things shown in that book during that time?

A The Sumter Electrical Company of Sumter, South Carolina.

Q They were doing that at that time?

A Yes, sir.

Q You said here a little while ago, as I understood you, that the Sumter Company of Illinois billed the engine manufacturer for the parts represented by this Plaintiff's Exhibit Defendants' Machine Type A?

A No, I didn't. That is a job that was billed by the Sumter Electrical Company, Sumter, South Carolina, that you have in your hand.

Q You say that because I am referring to this particular early type?

A Yes, sir.

Q A little later, when you made a smaller plug and so on, but otherwise of the same general construction—what do you call this in your trade?

A Type C-A.

Q Type C-A what?

A Plug oscillator.

Q Is that the type C-A plug oscillator as I have it in my hand?

A Yes, without the magneto.

Q Without the magneto?

A It would be a plug oscillator complete if it had that magneto.

560 Q What?

A It would be a plug oscillator complete if it had that magneto.

Q These plug oscillators, without the magnetos, were manufactured here by the Sumter Electrical Company of Illinois, were they not?

A We had the work done for the Splitdorf Company.

Q You had the work done? You mean you had the casting made at some factory here in Chicago?

A Yes, sir.

Q And where were the parts assembled?

A The parts were assembled in different places, several shops that did the work.

Q Here in Chicago?

A Yes, sir.

Q The Sumter Electrical Company of Illinois had that done? The Sumter Electrical Company of Illinois had that assembling work done?

A The Illinois corporation, yes, sir.

Q So that the Illinois corporation had made up the plug oscillators minus the generator?

A Yes, sir.

Q Those things the Sumter Company sent to the engine manufactories, did it not?

A Yes, sir.

Q For what did the Sumter Company of Illinois bill those manufacturers, the plug oscillator minus the magneto or for the entire equipment including the magneto?

A The entire equipment.

Q Including the magneto?

A Including the magneto.

561 Q And then I presume the manufacturer of the magneto, the Splittdorf Company billed the Sumter Company of Illinois for the magneto alone?

A Billed us for the complete job.

A Including the plug oscillator?

A Yes, sir.

Q They billed you for something you yourselves manufactured or had had manufactured here in Chicago?

A I told you previously that they gave us an order to make up a certain quantity of these plug oscillators, that is, without the magnetos, which we billed to them as they were produced.

Q That is, as they were produced here in Chicago for or on the order of the Sumter Company of Illinois?

Mr. Bulkley: He didn't say that.

Mr. Williams: I am not trying to confuse him. I must confess that I don't understand it.

Mr. Bulkley: It can all be explained in two minutes.

Mr. Williams: Q Can you explain the whole matter?

A Yes, sir.

Q Will you do so?

A When we obtained an order for this apparatus we would write or wire the Sumter factory that we had the order, that we had obtained such an order, or to issue us a purchase order to manufacture a certain sum of brackets and would

quote us a price on them on the complete job. We would have to pay them the price for the complete job, and we would bill it to our customer at whatever price we sold it at. The factory didn't know the price we sold it at, and as we manufactured the plug and we would bill them with what we called the plugs as they were manufactured on their purchase order to us. For instance, we would get an order for 100—

562 Q You say 'we' would get an order. You mean the Sumter Company of Illinois got an order?

A Yes.

Q When the Sumter Company of Illinois got an order, they did what?

A We placed a purchase order with the Sumter, South Carolina works, for that quantity of plug oscillators.

Q That means the Sumter, South Carolina Works, of the Splitdorf Company?

A I presume so, but I am not familiar with those changes down there. There might be the Splitdorf Company at one time and the Sumter Company at another time.

Q Now, you placed an order with them for what?

A For 100 plug oscillators complete.

Q Yes.

A And they would issue an order to us to manufacture the plug.

Q Then they would tell you to make something?

A Yes, sir.

Q Now, you, in this case, the Sumter Company of Illinois—

A Yes, we would farm that work out in Chicago and purchase the goods, and then when we got the job completed we would bill them back.

Q There are too many 'we's' for me. The Sumter Company of Illinois farmed out the order and then when you got the goods from the people to whom the order was farmed out—

A Yes, sir.

Q Then what happened?

A Then we would charge the Sumter Works with our costs—

Q Yes.

A The cost of manufacture of that plug, and they would bill us complete with the plug oscillator; we didn't know
563 what they would charge us at times for the magneto.

Mr. Williams: That is all.

Cross-Examination by Mr. Bulkley.

Q Did the Sumter Company, the Splitdorf Company, always pay the Illinois Company for that which they farmed out here to be made generally in Chicago in connection with plug oscillators?

A Yes, sir.

Mr. Bulkley: That is all."

Plaintiff's counsel here offered in evidence a stipulation relating to two of defendants' machines marked, respectively, Plaintiff's Exhibit Defendants' Machine Type B, and Plaintiff's Exhibit Defendants' Machine Type C. Exhibit C objected to on the ground that it was not a construction which was manufactured and sold by the defendants prior to the commencement of the suit.

Exhibit received subject to the objection.

HARRY G. WEBSTER, called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 48, residence, Chicago; occupation, consulting engineer. Not related to Mr. T. K. Webster. Witness stated his experience and qualifications as a mechanical and electrical expert, and his familiarity with patents, and further testified as follows:

"For the past 30 years approximately, my occupation has related exclusively to the operation, manufacture, investigation and development of electrical and mechanical devices. I have been employed in various engineering capacities ever since some time prior to the year 1900, and for several years prior to the opening of my present office was chief engineer of the North Electrical Company of Cleveland, Ohio.

I have had much experience in the investigation and development of electro-magnetic apparatus, particularly high speed electro-magnets in which the time factor is a critical characteristic.

This engineering work has included during the past eight or ten years considerable special investigation of ignition apparatus for internal combustion engines of different types.

I have had experience in the installation and operation of gas and gasoline engines. Much of the investigation of the

chemical and electrical apparatus from the standpoint of patentable novelty, or from that of patent infringement.

In connection with these investigations I have had occasion to examine and study many hundreds of patents, and have frequently been called upon to give expert testimony or advice in connection with patent litigation.

Q. Will you explain briefly the construction and mode of operation of internal combustion engines, using, if you see fit, any diagrams or other illustrative matter.

A. In making such explanation I will refer to a chart which has been drawn at my suggestion which chart is entitled 'Engine Cycle.'

An internal combustion engine, like a reciprocating steam engine, has a cylinder, a piston, a crank shaft, a connecting rod, extending between the piston and the cylinder and the crank shaft; but as its name indicates, the source or fuel for the power which the engine produces is burned within the cylinder of the engine itself, rather than under an extraneous boiler as in the steam engine.

565 This chart shows in Fig. 1, and throughout the other figures, a typical engine cycle of the four-stroke cycle type. In Fig. 1 of this chart the piston is shown in the position of the intake stroke, that is, the forward stroke of the piston during which the charge of air and gas is, as it were, sucked into the cylinder.

It will be observed that the intake valve 'G,' is open, the exhaust valve 'H' is closed, and that the piston 'B' is about at the middle of the stroke.

Proceeding with the cycle of the engine, as the cylinder, or the piston, rather, moves to the right, the crank shaft 'E' revolves or the crank 'E,' I should say, revolves with the crank shaft and gradually reaches the position indicated in Fig. 2, just shortly after the beginning of the compression stroke.

In the compression stroke the piston 'B' moves to the left, and in so doing compresses the charge of air and gas which has been taken into the cylinder on the intake stroke. During this compression stroke the valves, both intake and exhaust, 'G' and 'H' respectively are closed. Therefore, the charge of gas and air is compressed, and as the piston approaches the clearance lines, or the clearance position, it is indicated by the dotted line at the left of the cylinder, the igniter 'I' is actuated to produce the spark.

The igniter consists of a stationary electrode and a mov-

able electrode having an arm which carries a contact, engaging a contact on the end of the stationary electrode and just at the proper time in the compression stroke these electrodes are separated and must produce a spark to ignite—effective to ignite the charge which is then under compression. That ignition must take place at just the right time to produce the effective power stroke which follows.

566 The power stroke is indicated in Fig. 3 of this diagram, in which it will be understood that the combustible charge in the clearance space of the cylinder is ignited and has by the heat produced and the increase of pressure which follows, forced the cylinder forward on its third stroke—I should have said piston, and here again, under this condition, the intake valve 'G' and the exhaust valve 'H' remain closed so that all the pressure of the heated gases is exerted on the piston.

That stroke proceeds until the crank shaft is drawn past the dead center, and the cylinder starts in the reverse direction in the exhaust stroke, as illustrated in Fig. 4 of this diagram. And it will be noticed that as the piston moves towards the left-hand end or head of the cylinder under this condition, the exhaust valve is open allowing the products of combustion, the burnt gases, to pass out, leaving the cylinder in position to receive another charge of unburnt gas and air, as the cycle starts again in the condition illustrated in Fig. 1.

Before completing this answer I should, perhaps, point out that whereas the combustion of the charge in the cylinder is frequently referred to as an explosion, that there is an actual interval of time which does take place, and which must be provided for, in order to allow the complete inflammation of the charge of gas and air in the cylinder. It is because of the necessity for such an interval that it is necessary that the spark which ignites that charge should take place at a particular time in the compression cycle of the engine, or just as the compression reaches its extreme amount.

In starting the engine—for instance, in starting it by hand, where the fly wheel is spun, that ignition must take place or is ordinarily adjusted to take place at about the dead center, or about the extreme compression, but where an engine has got to running at a higher speed than that, the spark must
567 take place at an interval before the dead center position is reached, in order that the charge may be inflamed, completely inflamed, or sufficiently inflamed to produce the maxi-

mum pressure at the time when or just after the dead center has been passed.

If the spark occurred too late in the revolution of the fly wheel, takes place just at the end—at the dead center position, or just after that has been passed, then while the engine will run, it will operate very inefficiently and not produce the power that is got with the advanced spark, as perhaps your Honor knows.

The Court: I understand that.

Mr. Williams: Will you state briefly and in a general way what means have been employed for this ignition in internal combustion engines.

A In the early stages of the internal combustion engine art, the charge was ignited by a flame, so arranged that after the charge had been taken into the cylinder and about the proper time in the compression stroke, this flame would be brought in contact with the charge in the cylinder and the charge exploded.

I remember very clearly an engine operating in that way, which I saw frequently about the year 1905. But, that is regarded an obsolete method of operation at the present time.

Later what was called the hot tube ignition was used, that method of ignition being a tube or pipe connected with the cylinder, and kept at a considerable degree of heat, red hot, or pretty nearly white hot, by means of a flame constantly burning outside the cylinder. There was a chimney around this tube. The tube came up one side and this chimney was around it and caused the flame to burn under it, the idea being that the compression of a new charge would force sufficient unburned gas into this little pipe until it reached a point where the heat was sufficient to explode the gas. That

568 class of engine was considerably used and I think is still used. I had occasion to handle an engine of that kind about the year 1901.

But in later years, I would say for possibly the past ten or fifteen years, the most generally used ignition means has been that of an electric spark. I do not refer to ignition by compression of the charge, as in the Diesel engine, because that is an entirely different sort of cycle.

But electrical ignition is the thing that has been used almost universally for the past ten or fifteen years.

Q Can the means employed for electrical ignition, as you have described it, be subdivided or classified in any way; and, if so, how?

A Yes. A very good classification might be expressed as that of one type of ignition, one general type of ignition, being jump spark ignition, in which a spark plug with permanently separated electrodes extends within the cylinder of the engine, and a high tension spark is made to jump across between the separated points.

As compared with that is the other general type, what is generally known as the make and break ignition, in which a movable and stationary electrode are permanently located within the engine cylinder, and contact between these two electrodes mechanically broken at the instant that it is desired to make the spark.

Q What sources of electrical current have been employed in connection with this jump spark ignition equipment?

A In the jump spark ignition equipment the sources of current have been batteries operating by means of induction coil and vibrator, or in some cases direct current generators were used in the same way.

In later years the most popular source for jump spark ignition has been the high tension magneto.

569 With respect to the make and break system of ignition which operates at a comparatively low voltage, the current for this type of ignition has been furnished by batteries, by small direct current generators, by rotary magnetos, and by oscillating magnetos.

Q What various kinds of electrical ignition, what form or type, is and has for the past ten or fifteen years been commonly employed in stationary or portable gas engines or gasoline engines?

A My understanding is that for the past ten or twelve years and possibly for the last fifteen years, that on small stationary engines, running at comparatively low, or at medium speed, magnetos have been more generally employed. Possibly if we go back as far as fifteen years, the more general source of current at that period was the battery, with a kick coil inserted.

Q Will you explain briefly what an oscillating magneto is, as compared with a rotary magneto.

A A rotary magneto is generally understood to be one that is permanently geared to some rotating shaft of the engine with which it is associated, and geared in a particular angular relation, the reason for this being that the rotary magneto produces ordinarily a brief current impulse twice in each revolution of its inductor or armature. This magneto

is provided with a circuit breaker, which is intended to interrupt the sparking circuit at just the proper time, and in case of the make and break ignition, this circuit breaker control extends to the movable electrode within the engine cylinder.

That has the limiting characteristic in most cases, if not in all cases, that the engine must be cranked at a fairly vigorous rate in order to produce a satisfactory spark; and the further limiting characteristic that it is in constant motion, rotating throughout the entire operation of the engine, regardless of whether a spark is necessary in the cylinder or not. That is, it rotates all the time.

As compared with this, the oscillating magneto operates at intervals. It is of the same general type of magneto as the rotary magneto, in many cases, or as in the case of that manufactured by the complainant company, it is an inductor type of magneto, which is particularly adapted for oscillating work.

The distinctive characteristic of the oscillating magneto, is that the spark—or that the current, by means of which the spark is produced, occurs as a single impulse of minute duration during the return swing of the armature of the magneto, after it has been cocked or rotated against the spring tension, and then released by the disengagement of the push rod.

I don't know that your Honor is fairly clear as to what the relation of the push rod and the magneto is, and possibly I can illustrate it by means of this machine here.

This machine is marked Plaintiff's Exhibit Defendants' Exhibit Type B. Looking at the machine as your Honor is from the front, the push rod engages a part, which I will call a trip finger at an angle. This is the device, the push rod itself (indicating). Now, this push rod is mounted ordinarily on the exhaust rod of the engine, and during the compression stroke, it is moved towards the magneto in such a way that it rotates this yoke, which is the piece that the two springs are fastened to in that direction, and in this machine rotates it for about 30 degrees. At the proper time this push rod is forced out of engagement with the trip finger by the action of this cam projection, which is above the point of engagement. When that occurs the armature, or inductor, flies back in the direction of normal position with extreme rapidity, probably in the period of eight to ten one-thousandths of a second, and in doing so makes an electrical impulse, which

must be taken advantage of at just the right time, in order
571 that the spark may be made in the cylinder, and the way
in which that impulse is taken advantage of is by the
striking of—in this case, a cam shaped surface carried in-
tegrally with a yoke which on the rebound or overthrow of
the yoke of the rotor of which it forms a part, strikes one
end of the movable electrode, the end of which you can see
there, with sufficient force to separate the contact points
within the cylinder. If that action occurs at just the right
time a spark will be produced which will successfully ignite
the charge.

Q Will you illustrate or indicate in any way about the
duration of that electric wave, the generation of which you
have described?

A Yes, I will illustrate that by reference to an oscillo-
graph record made under my direction, which shows char-
acteristically the shape and direction of that current im-
pulse in a graphic way.

I don't know whether or not your Honor is familiar with
the instrument known as the oscillograph, or not, but the
oscillograph instrument is comparatively simple, but by
means of it what seemed to me some rather wonderful re-
sults can be secured in the way of analyzing the events which
take place within minute intervals of time. It is a device
in the nature of a box, possibly three or four feet long and
about 18 inches square. In one end of this box are posi-
tioned three mirrors, in the standard type instrument as
manufactured by the General Electric Company, from which
are reflected small, but intense points of light upon a moving
photographic film. These mirrors are each suspended upon a
pair of electrical conductors, lying within the field of a
powerful electro magnet. An arc light positioned off at one
side throws a powerful beam towards the box, and on or
against three small prisms from which three beams are di-
rected against these mirrors and reflected back toward a ro-

572 tating cylinder, about which a photographic film is
wrapped. The fact that these mirrors are mounted on
electrical conductors in a magnetic field, results in making
it possible, by passing an electric current through the con-
ductors upon which any particular mirror is mounted, to
cause that mirror to vibrate or oscillate in a manner corre-
sponding almost exactly with the shape of the current wave
that passes through those conductors. That oscillation in

effect—results, I would say, in moving a beam of light transversely across this film, which is in position to be rotated with the cylinder. The result is that when a mirror is vibrating at the same time that the cylinder is rotating, you have spread out on a film a record made by the beam of light which corresponds to the current wave which produces it, and the time of the occurrence can be calibrated, as well as the extent or amplitude of the current wave which causes the vibration.

If I have made that clear to your Honor I want to show the result of such an operation in reproducing graphically the current wave produced by this sudden recoil of the armature of one of these oscillating magneto machines.

This is a print made from such a photographic film. This is the film from which the print was made. I have added here explanatory characters. The line 'T' running along the center of the film, is what we call a time line and is produced for the purpose of timing the variations in the current which we wish to record. This line is produced by connecting the center one of the three mirrors in circuit with a source of 60-cycle current. The result of that is that the center mirror vibrates at the rate of 60 cycles per second. Therefore, one cycle of this center curved line represents one-sixtieth part of a second, and that gives us the basis for calibrating this film in the way indicated at the upper left. In other words, one inch of this film represents 247 ten thousandths of a second. The line 'M' in this case, is a small steady

573 spot of light which is registered in the film, because of the fact that we had no current circulating through the electrical conductors supporting the mirror from which this line reflects. In other words, that mirror was not moving. Therefore, the spot of light from the mirror draws a straight line. Perhaps it would be better understood if I explained that this record is made on a film wrapped around a cylinder which is rotating in that way before the mirror, and, therefore, represents the spots of light as they vibrate transversely. The line 'C' illustrates the impulse of the current which occurs during the recoil and subsequent oscillation of the armature, or inductor of the magneto. The starting point is indicated at the right. As this film starts to rotate in the oscillograph, the light spark from the mirror on the electrical conductor connected in circuit with the magneto is at first fairly straight. At the point marked 'I' the magneto cocking operation starts,

and because of that cocking operation, which was fairly rapid in this case, there is a slight impulse of current in a reverse direction, to that of the impulse which is going to be used for producing the spark. The end of the cocking operation is at point '2.' At that point the trip finger is released from the push rod, and the inductor or armature recoils at this extremely rapid speed back towards its original position. In that recoil it makes an impulse of current which registers this sharp curve on the diagram. That is curve '3.' The current rises almost instantly to its extreme value, and almost as quickly drops back to zero value again, and it is during that rise of current that the contact must be broken in order to produce an effective spark to operate a gas engine, and the time period during which that impulse occurs is as shown in this film approximately two and a half one-thousandths of a second. That will illustrate the extreme delicacy of the adjustment which must be secured between the armature 574 and the striker and contact with which it cooperates.

Mr. Williams: We offer in evidence the oscillogram, film and print, submitted by the witness, and ask that they be marked Plaintiff's Exhibits 46 and 46-A respectively.

(Said film and print were then received in evidence and marked Plaintiff's Exhibits 46 and 46-A respectively.)

Q Have you read and do you understand the patents in suit No. 1,280,105 to Kane, No. 13,878, reissue Number, to Podlesak, and No. 1,101,956 to Podlesak?

A I have and I do.

Q Will you describe the applicability of the invention of the Kane patent in suit, No. 1,280,105, to an internal combustion engine, and its utility and advantages when thus applied?

A The specification of the Kane patent in suit points out first that the object of the invention is to—"

At this point the examination of the witness, Webster was suspended to permit plaintiff to call and examine,

FREDERIC A. FISCHEL, who testified as follows:

Direct Examination by Mr. Williams.

Age, 36; residence, Chicago; lawyer by profession. Attorney for Webster Electric Company, and director of the company for past six years, and assistant secretary for a year and a half. That applies both to the present Webster Electric Company of Wisconsin and to the Webster Electric Company of West Virginia. The witness further testified:

Q Now, will you state how the officers, directors, stockholders, employes, business customers, of the Wisconsin corporation compare with those of the West Virginia corporation?

575 Objected to as immaterial and irrelevant and as not calling for the best evidence. Objection overruled.

Mr. Peaks: I do not believe that counsel intended to inject into that question the identity of the customers.

The Court: Have you got 'customers' in there?

The Court: Strike out the 'customers.'

A They are identical.

Mr. Peaks: That is a pretty large order. I move to strike that out.

The Court: Yes.

Mr. Peaks: As a conclusion.

The Court: Strike it out.

The witness further testified that as assistant secretary of both corporations he had had the custody of the minute-books and the stock certificate books and the stock ledgers of both corporations, but did not have the custody of them at the time he testified. He further stated that the Wisconsin corporation was organized in the month of March, 1918 and the West Virginia corporation dissolved in the month of May, 1918. He further stated that he had compared the list of stockholders of the West Virginia corporation, as of the date of the physical transfer by deed and bill of sale and assignment to the Wisconsin corporation, with the list of stockholders of the Wisconsin corporation, that they did not differ at all—that the identical persons who appeared as stockholders of the West Virginia corporation also appeared as stockholders of the Wisconsin corporation; also that the directors and officers of the two corporations were the same; also that

the Wisconsin corporation continued doing business at the same plant as the West Virginia corporation, and that the employees of the two corporations were the same, except as labor might shift. The principal employes were the same.

576 The witness further testified as follows:

“Q Will you state in a general way what was the nature of the transfer by which the assets were transferred from the West Virginia corporation to the Wisconsin corporation?

A About the first day of February, 1918, the directors of the West Virginia corporation held a meeting, in which a resolution was adopted, to the effect that it was deemed to be to the best interests of the West Virginia corporation to reorganize, and that there be organized in the State of Wisconsin a corporation, with a capital stock of six hundred thousand dollars; that the Wisconsin Company was to succeed to and acquire and own all of the assets, the patents and rights, of every kind and description, of the Webster Electric Company of West Virginia; and was to take over these assets, and assume all of the obligations and liabilities and liens and encumbrances against the properties of the West Virginia Company, and was to issue forty-eight hundred and sixty shares of the capital stock of the new company, and deliver them to three gentlemen as trustees, Mr. Webster, Mr. Rosenwald, and Mr. Brown. These trustees were to hold these 4860 shares, and exchange these shares with the shares of the West Virginia company which the old stockholders held. For every share of preferred stock which a shareholder in the West Virginia Company held, that holder of preferred stock was to receive one and three-quarters shares of the common stock of the Wisconsin Company; and for every share of the common stock of the West Virginia Company that such stockholder held he was to receive one share of common stock of the Wisconsin company. The Wisconsin company was then organized, in the month of March. The certificates of stock were physically delivered to these three trustees, and the three trustees communicated with the stockholders of the West Virginia company, and all of the stockholders of the West Virginia company turned over to the trustees their West Virginia stock, and took in
577 exchange therefor the shares of stock of the new company; and the Wisconsin company proceeded, standing at the same point where the West Virginia company stood.

* * * *

Q The trustees who thus acquired the stock of the two corporations then did what with respect to certificates of the two corporations?

(Objection and discussion between Court and Counsel.)

A There were certain instruments in writing executed, assigning the patent and the properties and the real estate, from the West Virginia corporation to the Wisconsin corporation.

Mr. Williams: Q Did you, Mr. Fischel, represent the Webster Company, or act for it, in connection with the execution of the Podlesak contract of February 5, 1914, regarding which you have heard testimony?

A I did.

Q Who drafted those contracts originally?

A Mr. Harry Podlesak.

Q They were presented by him, were they?

A They were, to me.

Cross-Examination by Mr. Peaks.

Q You say he drafted them originally. Who drew them finally, before execution? You say Henry Podlesak drew them originally. Now I am asking you who drew them finally, before they were executed.

A Mr. Podlesak presented a draft of what he desired, some time in the fall of 1913, and in January, 1914 his draft was typewritten by me, and it was taken by Mr. Podlesak and myself over to the office of Lynn Williams, and Mr. Lynn

Williams made some additional suggestions that he wanted in handwriting on it, and they did not seem acceptable to Mr. Podlesak, and finally Mr. Podlesak insisted on some of his own suggestions and interpretations, and that was the final contract.

Q That is to say, the contract as finally executed was the result of mutual changes?

A No. It was the result of the suggestions of Mr. Harry Podlesak, finally.

Q And of Mr. Lynn Williams?

A There were a few concessions made by Mr. Lynn Williams, that is, a few suggestions made by Mr. Lynn Williams, in which Mr. Podlesak acquiesced.

Q And were there any made by Mr. Podlesak in which Mr. Williams acquiesced?

A Oh, probably.

Q Yes.

A I suppose so.

Redirect Examination by Mr. Williams.

(Objection and discussion, no answer to question.)

Mr. Williams: Q This Exhibit D to the contract of February 5, 1914, contains a first substantive paragraph following the last of the 'whereas' clauses, which reads as follows:

(Paragraph read.)

Now, as to that paragraph of this contract, by whom was that drafted?

(Objection and discussion between Court and Counsel)

A That language, or substantially that language, was incorporated in the draft of the proposed contract which was submitted to me by Harry Podlesak.

(Objection renewed and sustained and testimony ordered stricken.)

Recross Examination by Mr. Peaks.

Witness stated that the capital stock of the West Virginia corporation was three hundred or three hundred and fifty thousand of common and one hundred thousand of preferred, and that of the Wisconsin corporation six hundred thousand common, no preferred. That of the six hundred thousand of the capital stock of the Wisconsin corporation four hundred and eighty-six thousand was given in exchange for all of the stock of the West Virginia corporation. The balance of one hundred and fourteen thousand remained in the treasury of the Wisconsin corporation and had not been issued, except that subsequent to the transfer an arrangement was made by which some of the employees of the corporation could acquire a certain number of shares of stock, and on their paying for it to the treasury, certificates were issued to them. Witness did not know whether the balance of one hundred and fourteen thousand had been subscribed or not.

Witness further testified that the holders of the common stock of the West Virginia Company did not hold preferred stock in exact proportion to their holdings of common stock, and that therefore by the transfer to the Wisconsin corpora-

tion on the differential basis there was accomplished a change in the proportionate interest of the stockholders in the Wisconsin corporation as compared with the West Virginia corporation in some instances. Being asked as to when he made his comparison to learn the identity of the stockholders, directors and officers of the two corporations, witness stated that he had made it almost daily from about the 5th or 6th of February up to about the 1st of April, and that there were transfers of stock during that period after the completion of the incorporation of the Wisconsin company; but those transfers were not in consummation of something which had been intended or arranged prior to the transfer. The identity of stockholders, directors and officers existed from February to April.

* * * *

Cross-Examination by Mr. Thompson.

Q Has this contract, that the court's attention has been directed to, has that been formally offered in evidence?

This inquiry of counsel led to an extended discussion 580 between all of the counsel and the Court regarding the final contract of settlement between Emil Podlesak and the Webster Electric Company, after which the following question was put by Mr. Thompson and answered by the witness:

“Q Mr. Fischel, was the final contract, whereby the stock of Emil Podlesak was taken over, that is, I am referring now to the stock in the West Virginia corporation, made prior or subsequent to the organization of the Wisconsin corporation?

A The contract whereby I acquired from Emil Podlesak his shares of stock in the West Virginia Company was completely executed and delivered on the 15th day of January, 1918, at Racine; and the reorganization of the corporations took place in March subsequently thereto. In fact the Board of Directors of the West Virginia company took no action toward a reorganization until the first day of February, 1918, and this contract had been completed on the 15th day of January, 1918. The paper which has been submitted to me is a copy of the instrument which was executed by Emil Podlesak and the Webster Electric Company, of Racine, on the 15th day of January, 1918, excepting that this copy does not bear the signatures nor the seals of the respective notaries.

Recross Examination by Mr. Peaks.

Q Mr. Fischel, I gather that you have the impression in your mind that by this transfer from the West Virginia corporation to the Wisconsin corporation there was no practical or substantial or effective change in the situation accomplished at all. What do you understand was the object? It was not done for fun, was it?

A No, sir. The object was done for a purpose of simplicity and convenience; we were at that time located in Racine, Wisconsin, and we were subject to the sovereignty, first, of the United States Government, and to the State of West Virginia, and to the State of Wisconsin; we had to make a dozen reports, to a dozen different authorities.

Our plant was there. We bought a new home. We were doing business there. The State of Wisconsin was very exacting in what it wanted from us, and we made up our minds, 'We are established, and we are going to stay in Wisconsin.'

Q Yes.

A Theretofore we had been in Tiffin, and in Chicago, and therefore we were licensed to do business under the laws of the State of West Virginia, but we felt at home in Wisconsin, and we were going to stay there.

Q And Ohio, I suppose. Now, you also had it in mind to also accomplish an increase of the capital stock, and the ownership of some of the increased capital stock, by certain individuals who were not then stockholders, hadn't you?

A No.

Q Didn't you tell us a little while ago that it was intended to introduce a profit sharing scheme, that would make some of the employees at Racine stockholders?

A That had been planned after we were fully incorporated, and felt that everything was set fine to go ahead and progress.

Q Then why wasn't it incorporated, in Wisconsin, for the same capital stock, and the same kind of capital stock, that it had been in West Virginia, in no change was intended to be accomplished?

A Why, when Mr. B. V. Becker, and Messrs. Simmons & Walker, at Racine, went to the physical organization of the Wisconsin Company, they evidently came to some conclusion that it was a good thing to incorporate for \$600,000. A statement was taken of the assets, the net—

Q I did not ask you that.

A Well, I am trying to explain why they got six hundred thousand.

582 Q Well, I did not ask everything they did in accomplishing it.

A I think you are right.

Q I asked the object. Now, when was it decided, and by whom was it decided to accomplish this differential in the transfer of preferred over common, for the Wisconsin common?

A By the directors of the West Virginia Company. Do you want the reason, Mr. Peaks?

Q I do not know that it is material. When was it decided to incorporate for \$114,000 more than the capital stock of the West Virginia Company?

A On the first day of February, 1918, the directors of the West Virginia Company adopted a resolution, a part of which said that there shall be organized a Webster Electric Company, of the State of Wisconsin, with a capital stock of \$600,000, divided into six thousand shares, of the par value of one hundred dollars each.

Q And did that say by whom the one hundred and fourteen thousand of excess should be subscribed?

A No. That resolution was silent on that subject, as I remember it. The resolution is here, in the book, which I will present to you.

Mr. Peaks: Yes. I see.

The Court: You understand, by the Wisconsin laws it was only necessary to subscribe half; not all of it.

Mr. Peaks: That is one of the things that, not knowing about, I was trying to cover, so that whichever way it might happen to go—

The Court: Fifty per cent must be subscribed.

Mr. Peaks: And the rest—

The Court: The rest will go—

Mr. Peaks: The rest is treasury stock, and they can do whatever they please with it.

583 The Court: Surely.

Mr. Peaks: It is just the other way here. I think that is all.

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Redirect Examination by Mr. Frank.

Q Mr. Fischel, Mr. Peaks I think started to ask you, and did not allow you to answer, why the differential, what he has referred to as the differential, was made. Will you now explain?

(Objection, overruled.)

A Because we unlucky holders of preferred stock never got any dividends on our preferred, which was cumulative, and at the time that this transfer was to be made, the stockholders, the preferred stockholders, were to be made whole on what belonged to them.

Recross Examination by Mr. Peaks.

Q And therefore you were given 175, for preferred?

A Or a holder of the preferred stock of the West Virginia Company had the right to turn in his preferred stock to the West Virginia Company, and get for every share of it the sum of \$135 in cash.

Q Or 175, in Wisconsin stock?

A In Wisconsin stock.

Q How much did you give Emil Podlesak for his preferred?

A For his preferred?

Q Yes.

A Well, there was a lump sum given to Emil Podlesak, as referred to in the contract, which you asked to be introduced in evidence.

Q Well, how much was computed as the value of his preferred, in arriving at the lump sum?

A I am frank to say I do not know, at this time. * * *
584 That was before this plan of reorganization had been given any thought by the directors.

Q Yes, two weeks before.

A Two weeks before.

Here followed a discussion between counsel and the Court in reference to the final contract of settlement between Emil Podlesak and the Webster Electric Company. Counsel on neither side of the case desired to offer it in evidence as part of their case, but the Court having expressed the opinion that it ought to go into the record, it was introduced, and read as follows:

Memorandum of Agreement Made and executed this 15th day of January, A. D. 1918, by and between Tesla Emil Podlesak and Webster Electric Company, a corporation organized under the laws of the State of West Virginia, Witnesseth:

Whereas, there is now pending in the United States District Court, for the Eastern District of Wisconsin a mandamus suit brought by said Podlesak against said Webster Electric Company; and

Whereas, there is pending in the District Court of the United States, for the Northern District of Illinois, Eastern Division, an equity suit by the Webster Electric Company against said Podlesak and others, known as Equity No. 553, and a common law suit likewise pending in said Court brought by the Webster Electric Company against Podlesak known as No. 32213; and

Whereas, said Tesla Emil Podlesak is the owner and holder of twenty-six (26) shares of the preferred stock and two hundred seventy eight (278) shares of the common stock of the Webster Electric Company and has an equitable interest in a certain promissory note made by the Webster Electric Company, dated the day of , under an arrangement known as the Webster Electric Syndicate Agreement; and

Whereas, said Podlesak is the owner of Patent Application No. 15198, now pending in the United States Patent Office, as said ownership may be negatived, limited or qualified under paragraph six (6) of this contract; and

Whereas, said Podlesak has made a claim for certain unpaid royalties alleged to be due him from said Webster Electric Company; and

Whereas, the Webster Electric Company has asserted claims by suit and otherwise for large sums of money against said Podlesak; and

Whereas, the parties hereto are desirous of settling and terminating their differences, and the Webster Electric Company desires to procure the stock in its Company held 585 or controlled by said Podlesak and to acquire his equitable interest in the promissory note heretofore referred to;

Now, Therefore, in consideration of the premises and One (\$1.00) Dollar, and other good and valuable consideration, by each of the parties to the other in hand paid, receipt of which is hereby acknowledged, the parties hereto mutually agree as follows:

First: Said Podlesak hereby simultaneously with the execution of this agreement transfers, assigns and sets over to the Webster Electric Company, or its nominees, two hundred seventy eight (278) shares of common stock and twenty six (26) shares of preferred stock in said Webster Electric Company.

Second: Said Podlesak hereby assigns, transfers and sets over to the Webster Electric Company or its nominees, his share of the promissory note of the Webster Electric Company above referred to, and also the receipt heretofore issued by Frederic A. Fischel, Manager, Webster Electric Syndicate, to the said Emil Podlesak, evidencing his interest in said promissory note.

Third: Said Podlesak hereby agrees that the mandamus suit now pending in the United States District Court, for the Eastern District of Wisconsin, may be dismissed forthwith without cost to either party, and to enter the proper order dismissing said action.

Fourth: Other than and expressly excepting and excluding herefrom the matters contained in paragraphs nine, ten, and twelve hereof, said Tesla Emil Podlesak remises, releases and forever discharges, and by these presents does, for himself, his heirs, executors and administrators, remise, release and forever discharge the said Webster Electric Company, its successors and assigns, of and from all manner of actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, executions, claims and demands whatsoever, in law or in equity, which he may now have against the Webster Electric Company, or ever had, or which his heirs, executors or administrators hereafter can, shall or may have, for, upon or by reason of any matter, cause or thing whatsoever, from the beginning of the world to the day of the date of these presents.

Fifth: Said Tesla Emil Podlesak agrees that he will not own, hold or become in any manner, directly or indirectly interested in any of the capital stock of the Webster Electric Company.

Five—a—Said Tesla Emil Podlesak agrees that he will not for any reason or under any circumstances, or as incident to any right or privilege whatsoever, hereafter endeavor to acquire access to any of the books or records of the Webster Electric Company.

586 Sixth: Said Tesla Emil Podlesak hereby grants to the Webster Electric Company a personal, non-exclusive, shop right license to manufacture, use and sell the invention or improvement described, set forth, or claimed in an application for United States Patent in Ignition Mechanism, Serial No. 15,198, filed by him March 18, 1915, and in any patent or patents that may be issued pursuant thereto or to any division or renewal thereof or in the reissue of any patent that may be issued pursuant thereto, within and throughout the United States of America and the territories and possessions thereof, for and during the term of said patents, or any of them; subject, however, to any rights the Sumter Electrical Company and the Splittdorf Electric Company may have or claim to have in said invention, and in any patent or patents that may be granted thereon.

Seventh: Tesla Emil Podlesak hereby releases and assigns to the Webster Electric Company, any and all rights, demands or claims which he may now or hereafter have in, to or under a certain assignment and agreement entered into February 5, 1914, between Emil Podlesak and the Webster Electric Company relating to foreign patents and applications, and in, to or under any of said foreign patents or applications there-in mentioned.

Eighth: The Webster Electric Company hereby dismisses and agrees to enter the proper order dismissing the suit pending in the United States District Court for the Northern District of Illinois, Eastern Division, known as No. 32213 and the suit instituted in the Circuit Court of Cook County, Illinois, known as Gen. No. 336774, in which action no service of process has been made and no appearance entered, both without costs to either party, as well as any and all other suits which may have been instituted by it against said Tesla Emil Podlesak, excepting only the suit mentioned in paragraph nine (9) hereof.

Ninth: The Webster Electric Company agrees to indemnify, hold, save and keep said Tesla Emil Podlesak entirely free and harmless against all damages, costs and any and all liability of any and every kind, which may arise out of or in connection with the equity suit pending in the Northern District of Illinois, Eastern Division, equity No. 553, or any decree arising therefrom, and to reimburse said Tesla Emil Podlesak for any and all expenses, loss or damage to which said Tesla Emil Podlesak may hereafter be put, or sustain in said matter, and to promptly satisfy and discharge any

and every judgment or decree which may be rendered against said Tesla Emil Podlesak in said action; it being understood that said Tesla Emil Podlesak had paid all costs, attorneys fees and other expenses, pertaining to said suit up to the date hereof, and that the Webster Electric Company shall, in no wise, be bound or obligated to assume or pay any costs, expenses or attorneys' fees incurred or contracted by the said Tesla Emil Podlesak in connection with or growing out of said suit, on or prior to the date hereof.

Tenth: The Webster Electric Company has simultaneously with the execution of this agreement, paid to said Tesla Emil Podlesak the sum of Thirty One Thousand Five Hundred eighty nine (\$31,589.00) Dollars.

587 Eleventh: Other than the matters contained in paragraph nine (9), and for the considerations of this contract, The Webster Electric Company has remised, released and forever discharged, and by these presents does, for itself, its successors and assigns, remise, release and forever discharge the said Tesla Emil Podlesak, his heirs, executors and administrators, of and from all manner of actions, cause and causes of action, suits, debts, dues, sums of money, accounts, reckonings, bonds, bills, specialties, covenants, contracts, controversies, agreements, promises, variances, trespasses, damages, judgments, executions, claims and demands whatsoever, in law or in equity, which it now has against said Tesla Emil Podlesak, or ever had, or which its successors or assigns hereafter can, shall or may have, for, upon or by reason of any matter, cause or thing whatsoever, from the beginning of the world to the day of the date of these presents.

Twelfth: It is expressly understood and agreed, anything in this contract to the contrary notwithstanding, that the parties hereto have not included, passed upon, settled or disposed of any rights, claims or contentions of the Webster Electric Company, the Splitdorf Electric Company, the Sumter Electrical Company, or of said Tesla Emil Podlesak pertaining to any of the matters and things mentioned, embodied or described in the contract of September 4, 1915, between said Tesla Emil Podlesak and the Sumter and Splitdorf Companies, copy of which said contract is hereto attached, marked Exhibit A for identification and hereby made a part hereof.

In Testimony Whereof the party of the first part has hereunto set his hand and seal, and the party of the second part has caused these instruments to be executed by its President, its corporate seal hereunto affixed, attested to by its

Secretary, pursuant to power and authority granted by the Board of Directors of said Company, this day of January, A. D. 1918.

(Seal)

WEBSTER ELECTRIC COMPANY

By

Its President

Attest:

.....
Secretary

588 State of Wisconsin }
County of Racine } ss:

I,, a Notary Public in and for said County, in the State aforesaid, do hereby certify, that Tesla Emil Podlesak, personally known to me to be the same person whose name is subscribed to the foregoing instrument, appeared before me this day in person, and acknowledged that he signed, sealed and delivered the said instrument, as his free and voluntary act, for the uses and purposes therein set forth.

Given under my hand and notarial seal, this day of January, A. D. 1918.

.....
Notary Public.

State of Illinois }
County of Cook } ss:

I,, a Notary Public in and for said County, in the State aforesaid, do hereby certify that T. K. Webster, personally known to me to be the President of the Webster Electric Company, and Frederic A. Fischel, personally known to me to be the Assistant Secretary of said Company, whose names are subscribed to the foregoing instrument, as such President and Assistant Secretary, appeared before me this day in person and simultaneously acknowledged that as such President and Assistant Secretary, they signed and delivered the said instrument as President and Assistant Secretary and caused the corporate seal of said Company to be affixed thereto, pursuant to authority given by the Board of Directors of said Company, as their free and voluntary act, and as the free and voluntary

act and deed of said Company, for the uses and purposes therein set forth.

Given under my hand and Notarial Seal, this day of January, A. D. 1918.

.....
Notary Public.

589 HARRY G. WEBSTER, resumed the stand on behalf of plaintiff, and further testified as follows:

Direct Examination Resumed by Mr. Williams.

Q Mr. Webster, I have asked you, in substance, this question, I believe: Will you describe the applicability of the invention of the Kane patent, No. 1,280,105, to an internal combustion engine, and its utility and advantages when thus applied?

* * * * *

A The specification of the Kane patent starts out by stating that the object of the invention is to provide simple and efficient devices of the character mentioned, that is, magneto generators for ignition systems of explosive engines. It a little later on states that:

‘My invention is particularly adaptable to the type of magneto generators employing an oscillatory armature or inductor, and in connection with the make and break type of ignition systems.’

The oscillating magneto, when used to its full advantage, comes pretty near being an ideal source of current for a make and break ignition system; but the fact seems to be that prior to the advent of the Kane improvement the use of such magneto in such a system was comparatively limited. The reason for this I believe to be in large part due to the failure of the constructors of that type of mechanism to recognize the characteristics of the oscillatory magneto to the full extent. By “these characteristics” I mean those to which I called particular attention in the preceding part of my testimony,—that is, that the current impulse produced in the recoil of the rotor of the magneto is of extremely transitory character, and must be utilized at an exact instant, in order to secure the best results.

590 The problem, therefore, with which Mr. Kane seems to have been confronted, in his effort to improve

the old style magneto, involved, whether he realized it or not, what might be called a sort of three-point synchronism; in other words, to use that oscillating magneto and the make and break igniter to its full advantage, it is necessary that the contact electrodes must be separated at a pretty definite time with regard to the cycle of the engine, and that the current impulse produced by the magneto generator must occur at almost—at the exact instant at which the contact electrodes are separated. There is a triple synchronism, as your Honor will see, between those three events. The spark must be timed in relation to the engine; and the oscillator rotor must be timed with respect to the separation of the sparking contacts.

Now, I am not going to take the time of the court pick out places in the specification where this Kane structure is described. It, as I think the court recognizes, is clearly set forth in the specification, and I think I can best explain just the line along which Mr. Kane proceeded in accomplishing this improvement by a reference to the machine which he had to start with and the one which he produced, that is, by reference to the physical devices themselves.

This big machine here, Plaintiff's Exhibit No. 11 (indicating exhibit) is the one with which the Harvester Company had so much trouble, and which they complained about. As it is mounted on the engine, that is, on the cylinder of the engine, the cylindrical orifice on the inside of the magneto structure is fitted onto a boss, and supposed to be held there rigidly.

As a matter of fact, it was because of its extreme weight, it appears to have been very difficult to hold it in a rigid position.

The rotor of this machine, which includes the four armed armature piece, the shaft to which it is attached, and
591 the yoke pieces, including the upwardly projecting trip finger, was cocked or initially actuated by a push rod moved by the engine across the small roller opposite the upper end of the trip finger, and thrust into a cocked position; and at the proper time, or so nearly as possible, was released and the rotor recoiled. The initial engagement and subsequent release of the trip finger by the push rod is related to the timing of the ignition with respect to the cycle of the engine. On the recoil of the rotor, its motion is transferred to the sparking electrodes, by means of the small rod extending in the direction opposite from the push rod, and connecting, by means of the coil spring, and the small washers, with

an oblong pole in the arm to which the movable electrode is fastened; and it is by this means that it is attempted to produce the separation of the electrodes and the ignition spark at the proper instant in the recoil swing of the rotor.

The machine is heavy, massive, and as it appears, would not stay in position. It will be recognized that any slight angular variation of the magneto upon the boss to which it is fastened would necessarily destroy the time relation, either with respect to the cycle of the engine, or with respect to the synchronism of the rotor movement with the breaking at the spark electrodes or both.

This seems to be the problem which faced Mr. Kane. His solution of it I will explain by reference to the physical device marked Plaintiff's Exhibit 12.

In this device it will be seen that the magneto is of much the same general form as that in the older and unsatisfactory machine, but that it has been brought into unitary relation with the spark plug body carrying the stationary and movable electrodes.

In this case that association has been accomplished by extending an arm from the flange of the spark plug, and mounting the magneto proper directly in or on this arm.
592 The rotor, comprising the four-armed armature, the shaft, the yoke, which is rigidly secured to the shaft, and the upwardly extending trip finger, is of substantially the same form in the old machine, but has now been brought into a relation with the contact electrodes such that after it has been cocked by the engine it then on recoil directly engages an outer arm fixed to the movable electrode.

Your Honor will recognize that by bringing the rotor,—that portion of it which acts as a hammer to strike the electrode arm, into direct physical engagement, that the possibility of securing accurate timing as between the breaking at the spark contacts and a particular time in the recoil swing of the rotor has been materially increased.

The result of that new relation of the parts was in effect making the device such that the movement of the sparking electrodes, and the return swing of the rotor was inherently synchronized, with respect to the particular point in the return swing at which the break at the spark electrodes must occur, in order to secure the best and most efficient spark.

In addition to that, the structure has been made a unitary one, embodying a much greater degree of physical strength and convenience and adaptability to almost any type of en-

gine, and required no work on the engine except that necessary to mount the spark plug itself upon the cylinder wall.

Mr. Williams has illustrated how much easier it is to remove this plug, examine the electrodes, and to put it back on the engine, without disturbing that essential relation between the rotor and the electrodes, by means of the model engine which stands on the floor here. I would like to make a similar illustration—Mr. Williams' illustration, however, was made with reference to the present Webster magneto, the refined result of the Kane improvement. I should like to illustrate by means of this model here, which I see bears no exhibit number, just what that convenience of removability means.

Looking at the device in the present state in which the magneto of the same type as the original Kane device, when mounted on the engine cylinder, and the frame on this model may be regarded as the cylinder wall. The push rod is actuated in this manner and tripped at the proper time to produce a suitable and satisfactory spark. Your Honor can see the effect.

When, as frequently becomes necessary, the spark plug is taken off to clean the contact points or to examine or test them, it is simply necessary to remove the nuts which hold the magneto in place, throw back the push rod which is attached to the engine and move the device like this, and you have it in your hand.

One great advantage is, one that I don't think has ever been accomplished before Mr. Kane, you can take it off and operate it just the same as if it was on the engine, see if you are able to get a spark in the cylinder, and put it back knowing when it is put back that it is going to operate in the same way. If there is a screw driver there— It is merely necessary to get in there with the screw driver and it will spark just the same. And that capacity is present in that original device to just the same extent. Mechanically it is the same. I don't think that is in condition to spark. In fact, there is no wire, no connection, but the construction is the same. I presume it is not necessary to put it back.

Mr. Williams: I will offer in evidence the demonstration apparatus last referred to by the witness and ask that it be marked as Plaintiff's Exhibit No. 47.

(Said apparatus was received in evidence and marked Plaintiff's Exhibit No. 47.)

The Witness: In view of the explanation I have just made

I desire to emphasize the fact that this is a unitary structure in which it is possible to secure and maintain the necessary exactness of synchronism between the movement of the rotor and the breaking of the electrode spark contacts, by direct engagement between the moving rotor and the outer electrode arm; and one in which it is possible to remove the device from the engine and operate it when it is so removed in the same manner as when on the engine, and replace it on the engine without disturbing all necessary physical relations.

It is a self contained device in that the driving springs which actuate the rotor are connected with the frame which is related to the rotor and there is no chance for disarrangement of that necessary physical relation when the thing is removed for inspection or testing or cleaning the contact points.

I think that states quite concisely the improvement, which Mr. Kane made as set forth in the patent in suit to which the question refers.

Q Will you describe now the applicability of the device of the Podlesak reissue patent 13,878 to a gas or gasoline engine, and explain its utility and advantages when thus applied?

A The Podlesak reissue patent 13,878 describes several improvements which may be regarded as in the nature of refinements of the device which Mr. Kane produced as set forth in the Kane patent just discussed.

One of these improvements is described in the patent as a particular relation between the springs which drive the rotor and the spring which returns the movable electrode after the contacts have been separated to make a spark. This spring relation as described is one in which the electrode spring is of less tension than the driving springs, of the magneto, and as providing an arrangement whereby the contact electrodes can be held normally separated and closed by the cocking movement of the rotor, and subsequently separate when it recoils.

Mr. Podlesak evidently saw some advantages in this phase of the improvement. Just what they were I don't know. It is not one with which we are particularly concerned.

Another phase of this improvement in this patent consisted in the provision of means additional to those by which the spark plug and igniter are fastened to the cylinder for positioning the spark plug with respect to the engine. He shows

it in the patent as Arm 12 extending to the right from the frame of the igniter plug, in Fig. 1 of the patent, the end of this rod engaging and resting between two lugs, 14, cast upon the cylinder wall; and explains that the purpose of this is to prevent angular displacement of the igniter mechanism, with respect to the push rod.

As illustrated in Fig. 4, he shows by dotted lines that if that igniter mechanism is displaced upward, as indicated by the dotted line 10, that it will throw out the entire time relation between the push rod on the engine and the igniter; in other words, it will interfere with the timing as between the engine cycle and the magneto operation. I don't know whether there is a model here showing that or not.

The Court: That is clear.

The Witness: It is clear. Your Honor understands it?

Another phase of the improvement which is set forth in this Podlesak reissue patent is that he provides a unit in what might be called the shelf construction. In other words, instead of providing that the arm which extends from the igniter plug and carries the magneto mechanism shall be as in the Kane arrangement, he forms a projection in the nature of a shelf upon which the magneto sits as upon a foundation from which it can be detached for convenience.

Now, while that may seem to be a small change, there are a great many advantages in that type of construction, particularly from the manufacturing standpoint. It provides, for example, that the magneto may be manufactured in one place and the bracket in another place, and both taken to a third place and assembled, and there are a good many advantages, advantageous results accomplished by means of this shelf type of construction. Those are the two particular things which I need to emphasize with respect to this Podlesak reissue patent.

That has the additional positioning device to insure the correct timing of the igniter mechanism with reference to the cycle of the engine. The shelf construction, and the igniter body with a frame such as to provide a platform upon which the magneto in itself may be bolted or removed.

Q Will you refer now to the Podlesak patent 1,101,956 and describe the applicability of the device of that patent on gas and gasoline engines, and explain its utility and advantages when thus applied.

A The improvement of the Podlesak patent 1,101,956 relates to means for cocking or setting the rotor of the mag-

neto by hand and independently of the motion of the engine, in order that the magneto may be tested with respect to the character of the spark conveniently when removed from the engine, or when mounted on the engine that it may be placed in its set position at which it is about to trip, and when so set held there in order that the adjustment of the push rod may be properly and conveniently made.

In other words, this is a lever device which is used as a catch for holding the rotor in proper position for tripping while at the same time the length and position of the push rod may be adjusted and set so that it will trip at just the proper time.

In addition this lever device serves as a device for starting the engine on the spark, as the expression is. Mr. Williams illustrated that in his opening statement by showing 597 how the gas could be drawn in, the engine then reversed to compress the gas, and then by pressing the lever by hand create an initial explosion and start the engine off without cranking.

This device is illustrated in the drawing of the patent and consists of a combination in which by means of a lever, 5, the pin carried on the rotor yoke, shown here as pin 16, supporting one end of the right hand driving spring 13, and the anchor pin which supports that driving spring, are utilized in combination with the lever in such a manner that the lever may be moved into engagement with the rotor yoke, thereafter continuing its movement, move the rotor to the cocked position, and at that point either allowed to lock and hold the rotor in a cocked position, or by continued movement of the lever handle release it in the same manner as when on the engine, and let it fly back and make a spark.

In other words, when making a spark for testing purposes it accomplishes in an exact manner what is accomplished crudely by the use of the screw driver as I showed your Honor with respect to the early Kane device.

Possibly I can illustrate that point a little more clearly by reference to one of the Webster Company standard magnetos which represents the commercial form of this Podlesak improvement.

Q Would you, in doing that, Mr. Webster, or before you finish this answer, indicate also how in the Webster Company present commercial product, as you now have it before you, these other devices of the Kane patent and of the Podlesak reissue patent are embodied?

A I will do so. In this commercial magneto, which I think your Honor will recognize, is a development first of the original Kane improvement in the unitary assembling of it, and in the exactness of the synchronizing between the 598 spark electrodes and the rotor movement; and in the shelf construction by which this can be taken off or separately manufactured and replaced or removed as desired; and in the positioning means which additional to the bolts which fasten the igniter unit to the cylinder, has a plug extending from the igniter frame engaging a dowel pin which in actual use would be fitted to the engine cylinder.

It embodies the Kane improvement, and those two improvements of the Podlesak reissue patent to which I have called attention.

The lever device is likewise found in this commercial machine. It is mounted on one of the anchor pins for the driving spring, which is as in the drawing of the second Podlesak patent, and operates to engage the rotor yoke and to move it to the cocked position in that way.

Now, if it is desired to utilize this device for adjusting the push rod in the proper way it is left in a locked position, as I have left it, and the push rod is set so that with the engine in the proper timing position for making the spark, that is, with the engine set in such a position so as to represent the necessary advance to take care of the combustion period in the cylinder, the push rod will rest just at the edge of the trip finger, and by means of a nut or other adjustment, if it is not in proper position, its length is adjusted one way or the other until it comes to the tripping position. Following that adjustment the wedge member carried on the push rod, and which serves by engaging the roller over which the push rod rides to raise the end of the arm to trip or disengage and thus trip the rotor. That is set by means of a set screw. So that just at this point, determined by the starting lever, as we call it, of this second Podlesak patent, it gets the proper time relation. If on the other hand it is desired to use the starting lever device for starting on the spark, or with the machine removed from the cylinder, you see if the proper spark is 599 present instead of stopping the movement of the rotor as I have described, allowing that locked relation to take place, this movement is simply continuous, making the spark in just exactly the same manner, substantially in the same manner as if it was actuated by the engine.

That I think covers the improvement which is represented by this second Podlesak patent.

Mr. Williams: We offer in evidence plaintiff's commercial machine as referred to by the witness and ask that it be marked Plaintiff's Exhibit 48.

(Said device was then received in evidence and marked Plaintiff's Exhibit 48.)

Q Let me ask you now to refer to claim 3 of the Kane patent and state whether they describe the defendants' types, Type A and Type B, and if so, give the reason for your answer.

A I have carefully considered claim 3 in the patent 1280105, and believe that the defendants' devices, Types A and B, realize without question the Kane invention, or the Kane improvement, as described in claim 3, regarding it, of course, as an engineering description of a structure.

My reasons for this conclusion can, of course, be best shown by pointing out wherein the description of the claim is met in the physical device.

I will endeavor at the same time to refer to a chart or drawing of this device in order to indicate the parts of the physical device with reference characters so that the record will read intelligently.

The chart to which I now refer is entitled "Defendants' Device, Type A, front diagram," and is a diagram illustrating the complete assembly of the Type A unit of which the bracket, defendants' machine, Type A, forms a part. This bracket corresponds to the diagram to the extent that it has the body portion and the shelf portion of the igniter unit 600 which in the diagram are lettered respectively A & B.

As your Honor will see, the diagram shows the magneto position on the shelf in the proper relation.

Referring now to claim 3, the device illustrated by this diagram has the field magnet, F. The field magnet is indicated at F. The inductor is indicated at Y in diagrammatic cross-section, and it is in position to oscillate within the field of force of the magneto. There are a pair of main actuating springs lettered H, H, on the diagram and carried on the bracket exhibit to which I have referred. The rotor of which the inductor forms a part also comprises the yoke member indicated diagrammatically at Y, and found on the bracket in the physical exhibit. This yoke, the inductor, and the shaft indicated at V in the diagram, are in the completely assembled device in practically rigid relation; that is, they

have an angular relation which remains unchanged during the operation of the device; and that is rigidly maintained by reason of the cast iron frame to which the magneto and the yoke parts of the rotor are respectively secured, the idea being to maintain a rigid angular relation such that when the rotor recoils and strikes the electrode arm it will strike at just the proper instant, and synchronize with the current waves set up in the winding by the movement of the inductor.

Continuing with the claim, the main actuating springs are connected at their free ends with the yoke member as shown in the diagram, by means of the pins, G.

The rotor also includes what I have called the trip finger, but which in the claim is referred to as an operating arm. This is the finger projecting at the side of the yoke lettered T in the diagram and correspondingly found in the physical device. This operating arm is a part of the yoke member in both cases, and in this case integral with it, and is adapted to be engaged by the push rod moved by the engine. In this 601 case the push rod has a convertible movement and strikes the trip finger on the under side vertically instead of horizontally as in the other device that I have explained.

The igniter unit further comprises separate or separable contact points within the combustion chamber and these are illustrated diagrammatically in dotted lines at M and O of the diagram and are found in a similar manner in the physical device.

There is also a light spring which serves to maintain these electrical contacts, or contact points closed, that is, in electrical contact. This light spring in the physical device is a helical spring which holds the movable electrode and serves to restore it to normal position with the contacts in engagement or in position to be engaged by the striker arm of the rotor after each operation.

The device further includes mechanism which may be regarded as possibly to permit the electrode, and the electrode stem extending to within the cylinder of the engine which is adapted to be engaged by a cam surface on the yoke member. These parts are shown on the diagram at E as the electrode arm, and at N as the electrode stem.

The curved cam surface which serves to engage this mechanism, to move the electrodes to form the spark is illustrated at—in this claim it is not described as a curved surface, but merely as a cam surface, and this is found in the diagram in the upper surface of what we call the striker arm

rigidly related to or forming a part of the yoke member. This is the striker arm, S, which engages by its upper surface the adjustment screw extending through the electrode arm, E. The construction is similar in the physical device. As required by the claim, the striking of that cam surface, or striker arm, causes the separation of the contacts within the cylinder, against the tension of the light helical frame to cause the spark.

602 The claim is similarly realized in the Type B device.

Referring to the physical device marked Plaintiff's Exhibit Defendants' Machine Type B, it will be seen that the arrangement of the magneto and its relation to the bracket and yoke member and driving springs is substantially the same as in the device I have just described, and I have here the push rod that is used in connection with this.

In order to make this a little more clear, I will refer to this perspective side view of the physical device which I have just referred to, which view or chart is entitled, 'Defendants' Device Type B, Side Perspective.'

Now, I don't know that it is necessary that I should go through the claim in detail with respect to that device. I would like to point out, however, with reference to the diagrammatic chart of the same device to which I now refer, entitled 'Defendants' Device Type B,' with the yoke forming part of the rotor indicated here in the diagram as Y, carrying a rather differently formed striker arm—as shown on this diagram it is a curved projection, S, which engaged the mechanism including the electrode arm, E, and the electrode stem, N, to separate the contacts, M, within the engine cylinder to form the spark.

This device, as your Honor will note, is cocked in a clockwise direction rather than in contra clockwise direction as in the Type A device, and the description of the claim applies to this device just in the same way as the one I have just made reference to.

Q While you have that Type B device and diagram before you, will you answer the same question as to claim 2 of the Kane patent and as applied to this Type B device?

A Claim 2 of the Kane patent reads much the same as claim 3, in that it describes the unit as a device calling for a 603 suitable field magnet and an inductor adapted for oscillating within the field of the field magnet, and a yoke rigidly connected for oscillation with the inductor and thus forming the rotor with the shaft which engages the yoke of the

inductor forming the rotor mechanism, and having projections at diametrically opposite points for supporting the driving springs as shown in the diagram at H, H, the projections being G, G, as previously pointed out on the other machine, and these driving springs supported on a stationary projection here which is integral with the frame to which the magneto is operated and the other stationary projection being similarly secured. As will be evident, these actuating springs tend to return the oscillating rotor to its normal position after the device has been tripped by the push rod.

The light spring is a helical spring, as I have already pointed out. The push finger is a rod with a curved end at one end and at the other to which I have previously referred to is formed the actuating device. The yoke has, as I have pointed out, the curved cam surface for which the claim calls, this being the curved projection S in the diagram, found correspondingly in the physical device; and the surface of this projection engages what is here called the push finger in the claim, but which I have referred to, for the sake of uniformity as the electrode arm on the overthrow of the yoke when returned to its normal position, and as called for by the claim there is the operating arm associated with the yoke, which is the projection which I have referred to as the trip finger, and the reciprocating mechanism called for by the claim, being driven by the engine, is what I have called the push finger, or push rod engaging the trip finger to swing the yoke, and the inductor, that is, the rotor, out of its normal position as called for by the claim, and releasing it at the proper point.

(Recess.)

Before concluding this answer, I wish to refer briefly 604 to the 1915 bulletin marked Plaintiff's Exhibit 41. On pages 38 and 39 of this bulletin are illustrations of the Sumter Type A igniter, referred to in this answer.

Figure 1 of this bulletin, page 38, shows a side view of the device, looking from the right, while Fig. 4, page 39, shows a side view, looking at the left. Figures 2 and 3 are front views, one with the magneto in the place upon the igniter frame; and Fig. 2 shows the same device, or the frame of the device, including the yoke portion of the rotor, with the magneto removed. The chart, Defendants' Device Type B, Front Diagram, is a diagram which in a measure combines figures 2 and 3 of this bulletin.

Q Just a moment. Do I understand that that bulletin (indicating)—

A No, I am in error. I should have referred to the other chart, entitled Defendants' Device Type A, Front Diagram, as being a diagram showing the relation of the parts corresponding to Figures 2 and 3 of this 1915 bulletin. I would also point out that the physical device Plaintiff's Exhibit Defendants' Machine Type A, consisting of the igniter body, and shelf, and the yoke portion of the rotor, is substantially the same as is illustrated in Fig. 2 of the bulletin. I also desire to compare this device Plaintiff's Exhibit Defendants' Machine Type A, bracket, with the bracket portion of the Kane device, marked Plaintiff's Exhibit No. 14, for the purpose merely of pointing out that the bracket and igniter body, portions of these devices, bear a corresponding relation to the complete igniter.

Q Will you please refer now to Claims 7 and 8 of this Kane patent, and state whether they describe the Defendants' device Type C, and if so, explain the reasons for your answer.

A Yes. It is my understanding that both Claim 7 and Claim 8 of this Kane patent, No. 1,280,105, described the Type C, device of the defendant. My reasons for this conclusion may be explained by reference to the physical device in
605 connection with a diagrammatic chart which I have had made of the device.

(Witness produces chart.)

This chart is entitled Defendants' Device Type C, Front Diagram, and shows in diagrammatic relation the cooperating parts of the magneto, and frame, and electrodes, as they exist in the actual device.

Referring first to the chart, it will be seen that whereas in the Type A and Type B device the yoke portion of the rotor, carrying the striker arm, is in exact axial relation with the shaft upon which the armature of the magneto is mounted, in the Type C device the yoke or striker portion of the rotor rotates about an axis somewhat displaced with respect to the axis of the armature. This can be readily seen, also by reference to the published pictures or views of the Sumter Company.

It will be seen that in the Type B device the rotor portion of the yoke is connected, or, the yoke portion of the rotor, I should say, is connected with the inductor or armature of the magneto by means of a forked connection or coupling, the two being in exact axial relation, that is, they both rotate about the same axis.

As compared with this arrangement, the type C device positions the axis of the yoke or striker portion of the rotor off at one side, with respect to the axis of the armature portion of the rotor. This can best be seen by reference to the chart, which shows the armature C rotating about a point directly centered between the pole pieces D D of the magneto, whereas the striker portion of the rotor rotates around an axis V to the left of the axis of the armature, so that while the two parts are maintained in definite relation, by means of a forked connection, Z, and whereas the relation between the angle of the armature and the time of the engagement of the striker arm S with the electrode arm E remains fixed and constant, inherently synchronized, as it were,—the arrangement is somewhat different from that in the Defendants' Type B, as I have explained.

With this explanation, I will point out that the Type C device is, as called for by claim 7, an electrical ignition device for an internal combustion engine, in which is combined a magneto generator, comprising as the claims says, rotor, stator, and generating winding.

In the Type C device the stator is, of course, the field magnets and frame and pole pieces, lettered respectively F; and the frame perhaps would include the shelf B; and the pole pieces D. The rotor includes the armature C, the shaft upon which it rotates, the rotating striker arm S, rotating about a center pin V, with the mechanical connection between them, including the pin G and the fork Z, the generating winding being the winding about the armature, marked W.

Continuing, the claim calls for a pair of relatively movable make and break spark electrodes, which are found in this device, just as in the types A and B, which I have previously considered.

The spring means found in this device (indicating) in a helical spring, wound about the shaft, upon which the striker portion S of the rotor moves; that is the spring, helical in form, which is seen without the housing portion of the electrical device, encircling the shaft or pin about which the striker arm moves, and serving to, as the claim says, normally hold the rotor, that is, this rotating system, in a certain position, that position, as I understand it, being the proper position for its engagement by the push rod of the engine.

The claim calls, also, for mechanism whereby the movement of the rotor effects the separation of said electrodes; and that mechanism, as I take it, may include the electrode arm

E, on the diagram, the electrode stem, N on the diagram, and possibly the arm M, which carries the movable contact piece.

607 The remaining description of the claim points out that all of these parts, to which I have previously referred, are mounted upon a rigid unitary and integral support, that being the bracket or frame of the device, which includes the shelf portion B, the body portion A, and the frame of the structure which serves to support these previously named parts in the definite timed or synchronized relation necessary for securing the best spark at the instant the electrodes are separated. The function of that frame is just the same as in the other devices, to co-ordinate these different elements into the proper synchronized relation, and, furthermore, to produce in combination a structure whereby all of these previously named parts may be removed from and returned to their position on the engine cylinder, as I have previously made clear with respect to devices A and B, without disturbing their relation to each other.

And the claim continues, by reciting, conductors, for carrying the electric current from the generating winding to the electrodes.

That is indicated here on the diagram by the dotted line W, by which the circuit connection comes from one end of the winding, through a wire to the insulated stationary electrode O, the other side of the circuit being traced from the other end of the winding to the frame of the device, and thence through the metal to the movable electrode, which is in direct contact with the frame.

The winding of the machine is thus normally in a short-circuited condition up to the time that the electrodes are separated to make the spark.

The concluding element of the claim is described as, Engine driven means adapted to oscillate said rotor against the action of said spring means, and then to release it,—that being the push rod, which engages the trip finger.

In this case, the trip finger is shown at T on the diagram (indicating); the push rod being the part, P, lying
608 behind the magneto, and engaging the trip finger at the point T, and subsequently releasing it at the proper instant, to make the spark at the proper time. It corresponds to the short rod, with a curved piece at one end, and a pivot at the other, that I have had here previously with the other two types of machines.

Q The question was to answer as to the three types, A, B and C.

A Yes.

Q I do not know whether you—

A I was going to consider claim 8; but your question directed me only to C, as I recall. Do you wish me to consider the other two types first?

Q Well, take it up in the order you please. The question that I asked, or meant to ask, was to consider Claims 7 and 8, with respect to three types, A, B and C. You have made some allusion to B, at least, as you have proceeded, but, if not sufficiently fully, I would like to have that matter covered.

A Well, I will by means of the chart briefly point out where these corresponding elements are found in the corresponding types A and B, if that seems desirable.

Referring to Type A, in connection with Claim 7, the rotor of the devices comprises the shaft, the armature upon which it is mounted, the yoke Y on the diagram, and post or striker arm, which is part of the yoke. The stator of course is the stationary portion of the magneto, as compared with the rotary portion, which I have just described. The generating winding, as shown in dotted lines in the diagram, is wound about the web of the armature.

The make and break spark electrodes are the electrodes extending within the cylinder, through the body portion of the magneto, and indicated on the diagram, Defendants' Device Type A, front diagram, by the dotted lines at M and O.

The spring means which hold the rotor in a certain position is in this case the pair of springs H, H, which are 609 located radially with the respect to the rotor (indicating on diagram) and serve to normally hold the rotor in position for proper engagement of trip finger T, by the push rod of the engine. And the mechanism by means of which the movement of the rotor effects the separation of the electrodes would include the electrode arm E, and possibly the screw which forms an anvil for the striker arm S to strike against to give the hammer blow which is necessary to rapidly separate the contact at O to make a satisfactory spark.

It will be apparent from what has already been said that the frame of the device is a rigid, unitary and integral support, and that all of these parts I have just mentioned are mounted upon that support, in such relation that they may be removed from the engine, inspected, and returned to the

engine without disturbing their relation to each other, for satisfactory operation.

The conductor for carrying the electric current extends in this case just as in the case of type C device, from one end of the armature winding, as indicated by the dotted line '7' to the stationary insulated electrode L, the other end of the winding being connected to the movable electrode N, and thus to the frame of the machine through the support for the device.

With reference to Type B, these same devices, rotor, stator, generating, winding, make and break spark electrodes, spring means for holding the rotor in a certain position, and the means whereby the movement of the rotor effects a separation of the electrodes at the necessary predetermined point of the movement of the rotor, are all found in substantially the same manner as in the Type A device, as is apparent from the diagram. I do not think I need to go over those in detail (indicating).

And similarly, the action of the armature to the electrodes is traced by means of the wire '7,' as in the case of the preceding device; and engine driven means for operating the 610 rotor is the push rod P, as before, and just as in the

Type A device; all of which parts first referred to are mounted upon a rigid, unitary and integral support, for preserving that relation, that operative relation required for the successful operation during the removal and replacement of the unit upon the engine.

Turning now to Claim 8, this claim is in the same language as Claim 7, up to the point at which the supporting member is mentioned, and it seems unnecessary to go over that in detail.

The claim calls for a supporting member, upon the several parts of which all of the aforesaid mechanism is mounted, and having a single integral part adapted to be attached to the engine.

In the case of the Type B device, this supporting member is the frame, including the shelf portion B, and the body portion A, upon which the several parts of the device are mounted and held in relation; and the same is true with respect to the Type A device, as illustrated in the diagram, which I have previously referred to; and this is likewise true of the Type C device, as is illustrated in that diagram. If your Honor desires, I can refer to those directly.

The Court: No. It is not necessary.

A The claim goes on to point out that by means of this supporting member all of the mechanism referred to may be removed from the engine by removing said single, integral part; and that I take it refers to the fact that it has a single point of attachment to the engine, where, by unloosening the single fastening means, as a pair of bolts or a clamp, the device can be taken off as a whole.

And this is true of the devices A, B and C, which I have been considering, the purpose of this being that these parts referred to may be removed from and returned to the engine with unchanged relations between any and all of the parts of the mechanism, thereby insuring the predetermined synchronism and inter-related adjustment of the mechanism when 611 it is replaced on the engine, which I have pointed out as one of the prime advantages of this unitary device. And, as in Claim 8, the claim likewise brings in the engine driven means adapted to oscillate the rotor, which is the push rod moved by the engine, and this relation, and result to which the claim refers, is found in all three of these devices, as will be apparent from what has been said.

Mr. Williams: I would like to offer in evidence now some of the diagrams and charts that the witness has referred to. I will ask that they be marked as follows:

The diagram of Defendants' Device Type A, as Plaintiff's Exhibit 49.

The diagram of Defendants' Device Type B, as Plaintiff's Exhibit 50.

The diagram of Defendants' Device Type C, as Plaintiff's Exhibit 51.

The diagram of Defendants' Device, Type B, Side Perspective, as Plaintiff's Exhibit No. 52.

The circulars illustrating the Defendants' Device Type B, as Plaintiff's Exhibits 53 and 53-A, respectively.

The circular illustrating the Defendants' Device Type C, as Plaintiff's Exhibit 54.

The diagram marked 'engine cycle' as Plaintiff's Exhibit 55.

(The said documents were thereupon admitted in evidence, and marked respectively as Plaintiff's Exhibits 49 to 55, inclusive, the same being respectively in the words and figures following:)

Mr. Williams: Q Will you please now refer to Claims 1, 2, 3, 7, 8 and 9 of Podlesak Re-issue Patent No. 13,878, and state whether they describe Defendants' Device of Type A,

and if so, select a typical claim, and explain the reason for your answer, by reference to that typical claim.

A Claims 1, 2, 3, 7, 8 and 9 relate to that feature of 612 improvement which I have previously explained as the provision of positioning means other than the regular fastening means of the igniter, for securing exact positioning of the igniter with respect to the engine cylinder, in order that the device may be maintained in proper timed relation with the cycle of the engine.

I can explain the presence of this improvement in the Defendants' Type A device, best, possibly, by reference to a photographic enlargement, which was made, of Fig. 1, found on page 38 of the 1915 bulletin, Defendants' Exhibit 41, and also by reference to the physical device, Plaintiff's Exhibit Defendants' machine Type A, which comprises the bracket and yoke portion of the device.

While the photograph is being located, I will say that this improvement, as found in the Type A device, consists in the provision of what may be called a dowel pin, fixed in the engine cylinder, in position to engage a co-operating hole in the body portion of the igniter frame. This is the hole (indicating), found in the physical device just referred to, positioned almost entirely below the axis about which the yoke portion rotates. This hole to which I point, when the bracket is put on the cylinder of the engine, is engaged by a dowel pin, to prevent angular displacement of the device with respect to the engine, and bearing in mind that this is attached to the engine by means of a bracket clamped against the base of the igniter plug, and held in place by a machine bolt; it serves to prevent what otherwise might be an angular displacement, such as to interfere with or prevent operation of the device with respect to the engine cycle, and with respect to the time of tripping.

This dowel pin arrangement is or should be illustrated in one of the photographs which I have asked for; and if your Honor can get the light on that, in the right position, you will see, indicated in red, by dotted lines, the place where that dowel pin is found (indicating). Do you see it?

The Court: Yes.

613 Here ensued a discussion between counsel with respect to the answer of plaintiff to defendants' interrogatories, regarding the claims of the several patents in suit upon which the plaintiff relied, with the result that plaintiff's counsel

stated that plaintiff relied upon claims 1, 2, 3, 7, 8, 9, 15, 21 and 22 of the Podlesak reissued patent; claims 2, 3, 7 and 8 of the Kane patent; and claims 1, 2, 3, 6, 11 and 12 of the Podlesak patent No. 1,109,156.

Witness then continued his answer as follows:

"Upon this photograph, which is entitled 'Defendants' Device Type A, Right Side,' I have drawn a lead line, and the reference character '9,' to indicate just where the position of that dowel pin is shown, in red ink. It is a little difficult to see, unless you get the light just right, because of the black background against which it appears.

Referring to Claim 1 of the Re-issue patent, 13,878, I am proposing to—

The Court: It is plain enough now, that I get the outline of it. (Indicating.)

The Witness: Just get the light right. I can point out my understanding of the manner in which this claim describes the device best, probably by reference to this photograph.

(The witness referred to a photograph, and indicated.)

If your Honor will let me have the photograph, I will just make my comparison briefly by means of that. The claim calls for the combination of an engine cylinder, a make and break igniter,—which would include the spark electrodes L and M, on the photograph,—an electric generator, which is indicated generally by the character F, having its movable element operatively connected with the movable element of the igniter. That operative relation, as I understand it, 614 is that whereby the striker arm on the rotor engages the arm of the electrode.

For example, referring to the large chart of the Type A device, Plaintiff's Exhibit 49, that is the engaging member of striker S, which engages the electrode arm E (indicating). That I understand to be the operative connection to which the claim refers.

The actuator, called for by the claim, is realized, I believe, in the engine push rod, by means of which the movable elements of the igniter and generator are operated. The igniter, as illustrated in the photograph, and in the large chart before us, is removable from the engine cylinder, as has been explained, while the actuator itself, that is, the push rod, remains connected to the engine.

And means are provided, in this dowel pin, fixed to the engine cylinder, and in the orifice in the igniter body, which is

engaged by that dowel pin, whereby— And this is a means in addition to the regular fastening means—whereby, in the language of the claim, the correct positioning of the igniter with respect to the actuator is insured, when the igniter is replaced on the engine after removal therefrom; and it further prevents the shifting of the igniter, with respect to the engine; and, as required by the claim, this latter means, that is, the dowel pin, and the portion of the igniter body which it engages, are, as is evident, parts on the engine cylinder and on the igniter which engage for the purpose described. I think the claim clearly describes the arrangement which I have explained by reference to this photograph, and which is actually found in the Type A device.

This is a typical claim, and I think the manner in which the other claims read will be evident, from what I have said.

Mr. Williams: We offer in evidence the photograph produced and referred to by the witness during his last answer, entitled 'Defendants' Device, Type A, Right Side,' and 615 ask that it be marked as Plaintiff's Exhibit No. 56.

(The said photograph was thereupon received in evidence, marked as Plaintiff's Exhibit 56.)

Mr. Williams: Q Will you please refer now to Claim 15 of this Podlesak Re-issue Patent, No. 13,878, and state whether it describes defendants' devices of Types A, B and C, and give the reasons for your answer?

A Yes. This claim, as I understand it, describes all three devices. Referring first to Type A, as illustrated in the chart, Plaintiff's Exhibit 49, the device—

The Court: Isn't that plain? Does it require a skilled witness to cover that?

Mr. Williams: I am sure it does not, in this court. Sometimes one is embarrassed later, not to have it in the record. We are trying to make it brief. I do not know that we require more there than the affirmative answer.

The Court: No, I do not think so,—an affirmative answer. The Court of Appeals never requires you to conform to that old rule of the Supreme Court, enforced in other circuits,—that they will not take anything for granted at all. If you get an affirmative answer to that question, or the different questions, covering that claim, it is enough. It is perfectly clear in the claim.

Mr. Williams: Q Let me ask you, Mr. Webster, the same question as to Claims 21 and 22 of the Podlesak patent,—and those are all of the claims,—that is, that concludes the

claims of that patent to which we shall make reference especially; and in view of the fact that the element that the witness has been specially referring to in connection with Claims 1, 2, 3, 7, 8 and 9 is not found at all in Claims 15, 21 or 22, I would like, if the court is willing to have a slightly detailed answer, as to some of those claims.

616 The Court: All right.

Mr. Williams: I am not going to insist that every one be gone through. But, if you will take 21 and 22, and compare them with the Types A, B and C.

A I have compared Claims 21 and 22 with all three devices, Types A, B and C, and find that they do fairly describe each one of these devices. Referring, for example, to Claim 21, and, for purposes of illustration, to the chart Plaintiff's Exhibit 49, Defendants' Device Type A, Front Diagram, as shown in this chart the device comprises an igniter frame having a body portion indicated generally by A, carrying relatively fixed and movable electrodes, L and M (indicating on chart), mounted in the body portion, and supporting shelf or base, indicated at B as extending laterally from the body portion and integral therewith; this shelf supports the electric current generator, comprising field magnets F; and a rotor made up of the armature C, the shaft V, and the yoke portion Y, there being on this rotor an arm in the form of the striker arm S; also on this rotor portion a trip finger T, a spring tending to hold the arm of the electrode in engagement with the striker arm of the rotor, this being the helical spring Q (indicating); spring means connected with the rotor for holding the same in a predetermined position, found in the driving springs H, H. (indicating); which by reason of their slight initial strain hold the rotor in such a predetermined position that the trip finger T will be engaged, and tripped, at the proper time by the push rod of the engine; and an integral bracket; and the integral bracket to which I have previously referred, as comprising the body portion A and the shelf portion B, extending laterally therefrom, and upon which the generator is mounted.

Claim 22 is in much the same language and I think its application will be apparent from the application I have made with respect to claim 21.

Similarly, with respect to Defendants' Device Type B, in this chart (indicating) Plaintiff's Exhibit 50, the corresponding parts bear corresponding reference characters, and it

seems hardly necessary to go over these in detail. The
617 Type C device, as illustrated in the chart, Plaintiff's Exhibit 51, similarly bears reference characters, the same as for the corresponding parts in the two charts previously mentioned; and what I have already said with respect to claim 21, will, I think, make the application clear.

Q Will you please now refer to the next patent, number 1,101,956, and particularly to claims 1, 2, 3 and 6 of that patent, and state whether they describe the Defendants' Devices Types A and B, and if so, select a typical claim, and explain the reason for your answer.

A I have compared Claims 1, 2, 3 and 6 with the devices, Types A and B, to which you refer, and find that these claims fairly describe the devices referred to.

Selecting Claim 6 as a typical claim, this may be applied to Defendants' Device, Type A. By reference to the chart, Plaintiff's Exhibit 49; it will be observed that this chart shows, in dotted lines, at '8,' a lever of much the same shape as that which I used in illustrating the operation of the Plaintiff's Device, while removed from the cylinder.

I have here the lever indicated at 8 on this chart, and by reference to physical exhibit, Plaintiff's Exhibit Defendants' Machine Type A (indicating exhibit) will illustrate how it is used.

It will be seen that the hole in the lever fits on the post which anchors the upper end of the top driving spring, and that when placed in position thereon, and the upper end moved to the right, it engages with the upper post projecting from the voke portion of the rotor, and moves the same to cocked position (illustrating).

If the movement is discontinued at that point, the rotor, including the armature of the magneto, remains in that position just at which the tripping point is reached. Continued movement of the lever trips the rotor, in substantially the same manner as when on an engine, and secures the re-
618 sult of allowing observation of the spark with the device removed from the engine.

Considering the language of Claim 6, which I have selected as typical, the combination includes or comprises a current generator, including a rotor, which is indicated generally, indicated in the diagram, Plaintiff's Exhibit 49, as I have previously described; and this current generator includes the rotor comprising the armature, armature shaft, and yoke, which forms the rotating system of the device.

The actuator for moving the rotor, the crank arm connected with the rotor, to which the claim refers, is found in that portion of the yoke with which the free end or engaging end of the actuating lever engages; and one of the main driving springs is connected with this crank arm, as shown at the upper spring H in the diagram, which is connected with the upper arm of the yoke, and the pin G projecting therefrom, the anchor for the other end of the spring being the upper post, fixed to the frame of the device.

The claim describes a device mounted on the anchor for the spring, and movable into engagement with the crank arm to move the latter and place the spring under tension and release the arm for permitting the spring to quickly return the rotor.

This so-called device is the hand lever, the use of which I have illustrated by means of the physical exhibit, Plaintiff's Exhibit Defendants' Machine Type A, and which is illustrated at '8' in the chart, Plaintiff's Exhibit 49.

As I have illustrated, this lever is movable into engagement with the projection of the crank arm to which the lower end of the upper driving spring is fastened, and thereupon serves to move the crank arm, and place the spring under tension, and by continued movement to release the arm for permitting the spring to quickly return the rotor to its normal position and create the spark, and operates in this respect just exactly as is described in the patent.

619 The defendants' device Type B, is provided with a corresponding lever arm, and operates in just the same way as does the Type A.

I have here the device, Plaintiff's Exhibit Defendants' Machine Type B, and I think this same lever is of the proper size to fit on this machine. I will, by placing the lever with its hole engaging the upper anchor post, which holds the upper end of the driving spring, and moving the lower end of the lever arm into engagement with the yoke of the rotor (illustrating), it will be seen that by movement of the lever the rotor is thrown into cocked position, and then released, just as is the case in the Type A device, and the claim applies in a similar manner.

Q Will you answer the same question relative to Claims 11 and 12 of this same patent, and as applied to the defendants' devices, Types A and B?

A Claims 11 and 12 relate more particularly to the use of this device or lever in combination with the parts of the

machine, for gauging purposes, as I explained in connection with my reference to the improvement of this patent. Its use in this particular may be illustrated by the physical device, Defendants' Exhibit Defendants' Machine Type A, to which I now apply the lever (illustrating), and move by its means the rotor arm into cocked position. In this position on the engine, the position, or proper adjustment and positioning of the end of the push rod, and of the means for lifting the push rod out of engagement with the trip finger on the rotor may be adjusted in the same manner as I have previously explained in connection with this patent.

It will be seen that the lever for this reason serves as a gauge to enable proper adjustment of the actuator with respect to the trip finger.

As referred to in Claim 12, for example, we have in this device, Type A, a current generator, including a rotor, as I have described; a crank arm connected with the rotor, which is the pin projecting from the upper end of the yoke for engagement with the hand lever; a member on the arm, which is, as I take it, the post itself which is directly engaged by the free end of the lever; a spring connected with the crank arm, which is the upper driving spring of the device; a device, as the claim states, movable into engagement with the member, that is, the post on the rotor, for moving the arm, that is, the crank arm, against the tension of the driving spring, and adapted to interlock with said member in the interlocked position in which I have now placed it (illustrating), for holding the arm stationary while the rotor is in cocked position, as it now is.

And the claim further calls for a rotor actuator adapted to be adjusted with respect to the rotor, while held in cocked position by the said device, this rotor actuator being the push rod, or equivalent device, moved by the engine, to engage and subsequently trip the rotor at the proper time with respect to the cycle of the engine.

Claim 11 reads, on the Type A device, in a similar manner, and I hardly think it necessary to consider it in detail. And similarly, with respect to the Type B device. The relative position of the parts called for by the claim, and of the starting lever which co-operates with it, is substantially the same; and the claim reads upon the Type B device in substantially the same manner as I have already applied to Claim 12.

Q Without going into detail, will you say whether all of the claims to which you have been referred, that is, all of the

claims of all of these three patents, describe the plaintiff's commercial machine, as exemplified in Plaintiff's Exhibit No. 48.

A I have carefully considered all of these claims with respect to the Plaintiff's Device Exhibit 48,—not only in the size as found in this Exhibit, but in the larger size machines, which are similarly constructed, and am convinced that all of these claims read upon the plaintiff's device in substantially the same manner as upon the defendants' devices 621 which I have been asked to consider.

Q Will you look at these photographs marked 'E. J. Kane Device, Side View,' and 'E. J. Kane's Device, Top View,' and state what they illustrate, and how the device illustrated therein compares with the Plaintiff's Exhibit No. 47 herein?

A I have examined the photographs which you hand me, and understand them to be photographs of the device, Plaintiff's Exhibit 47, to which you have directed by attention.

Mr. Williams: We offer in evidence the photographs, and ask that they be marked Plaintiff's Exhibit 57 and Plaintiff's Exhibit 57-A, respectively. That is all of the direct.

(Said photographs were thereupon received in evidence, marked respectively as Plaintiff's Exhibits 57 and 57-A, and the same were and are as follows:)"

By agreement of counsel and the Court the examination of the witness Webster was here suspended to permit plaintiff to call another witness.

SIDNEY A. LOEB, called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 32, residence, Racine, Wisconsin; occupation, secretary and treasurer of the Webster Electric Company. Connected with the company since January, 1910. Present throughout the examination of the previous witnesses. Asked to state the number of devices, or the kind referred to in this trial as having originated with the Webster Electric Company, sold by the Webster Company, both the Wisconsin and the West Virginia corporations, during the years the witness had been connected with the company, he said:

622 "Beginning with the year 1912 they were 8956; 1913, 11450; 1914, 11458; 1915, 46444; 1916, 91445; 1917, 106,773; 1918, 129,785."

Asked to state, year by year, the amount of royalties which had been earned and paid under the contract of February 5, 1914, in evidence, the witness said:

"Beginning with 1914, \$4854.15; 1915, \$9701.89; 1916, \$19,102.51; 1917, \$22,331.69; 1918, \$26,877.38."

Asked to state also, the royalty payments made to the Podlesaks under the previous royalty contract of November 2, 1908, witness said:

"Beginning with 1910, \$1547.18; 1911, \$2998.02; 1912, \$3345.29; 1913, \$4661.31."

Witness further testified that up to and including the year 1913 practically the entire business of the plaintiff was with the International Harvester Company, but that with each succeeding year thereafter the customers had increased until the majority of the engine manufacturers in the United States were using Webster ignition.

Witness further testified, against objection by defendants' counsel, overruled by the Court, that plaintiff paid the expenses of the suit commenced by plaintiff against the Sumter Electrical Company of Charleston, South Carolina.

The witness further testified, against the objection of defendants' counsel, overruled by the Court, that the witness was familiar with the suit commenced by the Webster Electric Company, or at its instance, against the Alamo Manufacturing Company, in the Eastern District of Michigan, Southern Division, entitled Emil Podlesak and Henry J. Podlesak, and the Webster Electric Company, plaintiff's versus Alamo Manufacturing Company, defendant, Equity No. 112, on reissue letters patent No. 13,878, which suit was commenced early in the year 1915, and that the Webster Electric
623 Company met all of the expenses of that litigation on the plaintiff's side of the case.

No cross-examination.

A. C. KLECKNER, having been recalled as a witness, further testified as follows:

Direct Examination by Mr. Williams.

Webster Electric Company now has on its engineering records between 350 and 400 different types and designs of igniter plug supporting brackets. The number of active brackets being probably 100. Identified catalogue of the Webster Tripolar Oscillator, recently published, which was offered in evidence as Plaintiff's Exhibit 58. Webster Electric Company manufactures six different sizes of the magneto equipment referred to, being types M, K, L, JZ, JY and PY, all shown in catalogue Exhibit No. 58. Witness states that he was to a very large extent, familiar with the condition relating to stationary and portable gas and gasoline engines and estimated that 80 per cent of the single cylinder stationary and portable gas or gasoline engines, sold in this country are equipped with plaintiff's magneto apparatus. Of the remaining 20 per cent, 10 per cent were equipped with jump spark ignition and the remaining 10 per cent with battery ignition. According to the information of the witness, he having testified that his business made it necessary to know the facts in this connection, oscillating magnetos were used in connection with gas or gasoline engines in this country to a very limited extent prior to the advent of the Kane equipment in 1909, as this witness heard it described at this trial. Witness thought that not over 5 per cent of all of the engines manufactured in this country were equipped at that time with oscillator magnetos of any kind. Witness was nineteen years old at the time he entered the employ of the Webster Company in 1909.

Plaintiff's counsel offered in evidence certified copies of certain pleadings and papers in the case of Emil Podlesak,

Henry J. Podlesak and Webster Electric Company versus 624
sus Alamo Manufacturing Company, in Equity No. 112,
in the District Court of the United States for the Eastern
District of Michigan, Southern Division, and the same were
marked Plaintiff's Exhibit 59.

Objected to, received subject to objection.

Plaintiff's counsel offered in evidence as Plaintiff's Exhibit 60, two telegrams and two letters sent by Sumter Electrical Company and Splittorf Electrical Company, respectively, to

plaintiff's counsel, Mr. Williams, the identity and authenticity of the letters and telegrams being admitted by defendants' counsel.

Counsel for the defendant Emil Podlesak objected to the introduction of Plaintiff's Exhibits 59 and 60 as irrelevant and immaterial with respect to said defendant. Objection overruled.

Plaintiff's counsel offered in evidence as Plaintiff's Exhibit 61, a letter dated August 10, 1915 purporting to have been written by Mr. Manning of the Chicago branch of the Sumter Electrical Company to Mr. Vandeventer, defendants' counsel admitting, subject to verification, the identity of the letter.

Plaintiff's counsel inquired if defendants' counsel would stipulate that Mr. Vandeventer conferred with Mr. Schley, attorney of record for the defendant in the Alamo suit, and assisted him in preparing the defense of that suit. Defendants' counsel declined to so stipulate, whereupon

H. R. VANDEVENTER, having been recalled as a witness, testified as follows:

Direct Examination by Mr. Williams.

Witness met Mr. Schley. Did not think he knew who he was at the time witness met him, but was not sure. Schley came to the witness to inquire relative to the prior art which might have a bearing upon the Podlesak reissue patent No. 13,878 which was involved in the Alamo suit, and witness gave him such information as he could that would be of aid to the defendant in defending an infringement suit based upon that patent. The conference of the witness with Mr. Schley was shortly prior to August, 1915, before witness had had any negotiations or discussion with the Podlesaks looking toward the consummation of the contract of September 4, 1915.

Cross-Examination by Mr. Bulkley.

Q Did you know when Mr. Schley came to you and talked about the prior art, anything about his being attorney for the defendant, the Alamo Company, in that lawsuit that has been referred to?

A. No, sir, I don't think I did. Mr. Schley came into my office and told me who he was, and if I remember correctly he told me that the Podlesaks were suing the Alamo Company and wanted to get what information I had relating to the prior art in this line of work, and I talked with him and I believe wrote him a letter embodying the substance of my conversation, and he departed and I have not seen him since.

The Court: Is that all there was to it?

A. Yes, sir.

The Court: The Podlesaks were complainants in that suit, were they?

A. I believe so; yes, sir.

Mr. Williams: The Podlesaks and the Webster Electric Company?

The Court: Yes.

626

February 3, 1919.

Hearing Resumed.

Plaintiff's counsel offered in evidence as Plaintiff's Exhibit 62 the Cut-Away engine referred to in the direct examination of the witness, H. G. Webster. Thereupon said witness resumed the stand and was tendered for cross-examination.

Cross-Examination by Mr. Peaks.

"Q Is there anything about this art, or otherwise, that you think would be helpful to the court for you to tell, that you have not already told?

(Objection—overruled.)

A I hardly know how to answer the question.

Mr. Peaks: Very well. That is all.

Mr. Bulkley: No further cross-examination."

Here ensued a long discussion between counsel and with the Court regarding plaintiff's Exhibit No. 61 being a letter purporting to have been written by Mr. Manning to Mr. Vandeventer under date of August 10, 1915 and concerning which a stipulation previously appeared of record. Defendants' counsel stated that insofar as the previous stipulation admitted that the letter had been received by Mr. Vandeventer it was inadvertently made, the fact being that while the letter was written by Mr. Manning and was received at the office of the Sumter Company, it never reached Mr. Vandeventer. Defendants' counsel further stated that Mr. Manning and

Mr. Vandeventer were present and might be called by plaintiff's counsel and examined without being bound by what they said.

"The Court: If the admission was made inadvertently, it may be withdrawn.

Mr. Peaks: Absolutely. Now, we admit, deliberately, and will be bound by it, that the letter was sent, and was received at the Sumter office, but Mr. Vandeventer, personally, to whom it was addressed, never got it, and he will so testify. You can call him, if you like, without being bound by what he says."

Thereupon F. C. MANNING, being called as a witness, on behalf of the plaintiff, testified as follows:

Direct Examination by Mr. Williams.

"Q Will you state your name, age, residence and occupation?
* * * * *

A F. C. Manning. Residence, South Orange, New Jersey. General sales manager Splitdorf Electrical Company. Age, 48.
* * * * *

Q What was your business connection on August 10, 1915?

A I was sales manager of the Sumter Electrical Company of South Carolina.

Q Were you an officer of that corporation?

A Yes, sir, I was Vice President.

Q You have heard read this letter of August 10, 1915?

A Yes, sir.

Q This letter reads in part "Although I am terribly rushed today, trying to get things in shape to leave for Nebraska tonight, H. J. Podlesak dropped in." Did Podlesak drop in, as stated in this letter?

A Yes, sir.

Q When was that?

A The letter states, I believe, when it was. I could not tell you more than the letter says. I take it that he dropped in just previous to my having dictated this letter.
* * * * *

Q This letter was written, I understand, on August 10, 1915, was it not?

(Objection and discussion, no answer to question. 628 Defendants' counsel admitted that the letter was written and mailed on date mentioned.)

"Q. Now, in view of the fact that this letter was written on August 10, 1915, can you state, either as a matter of your independent recollection, or as a matter of record made by you in this letter, when it was that you talked with H. J. Podlesak?

Objection—overruled.

A No, sir.

The Court: Do you know? Do you recollect?

A I surmise, again, that it was on—

The Court: No. Do you recollect talking to him, any time?

A Yes, sir.

The Court: But you do not know when?

A No, sir.

Mr. Williams: Q This letter reads: 'H. J. Podlesak dropped in, and gave me a chance to find out what he knew about Webster's latest move.' Now, who was referred to in that letter by 'Webster'?

Mr. Peaks: We will admit that it was the predecessor of the plaintiff corporation.

Mr. Williams: All right.

Q Now, what was the latest move, Mr. Manning, that is referred to in that letter? What did you mean when you wrote that?

(Objection—overruled.)

A There was a move that was made at Newark, when you and Mr. Brown went down to Newark and told the General Manager of the Splitdorf Company that you had certain patents that would dominate the Dixie high tension magneto principle, and that you were going to push, or sue them for infringement, or something of the sort, if they did not 629 insist on my getting out of this stationary engine field up here, to which the Webster Company were developing some business, in connection with their Webster oscillator; and I did not like the idea of feeling that I should be ejected from that field, when I knew I had a perfect right

to work in it, and I had spent a good many more years than anybody else in the stationary engine ignition field, in developing magneto ignition for those engines, and I did not see what right you would have in going down there and making a threat like that, with Mr. Curtis, and trying to throw me out of this stationary engine ignition field, when we had certainly, as I understood, a perfect right to sell and manufacture and prosecute all the business we could in that particular line.

Mr. Williams: Q Now, what transpired there at Newark between Curtis—

Mr. Peaks: Perhaps, before we forget it, I would like to know what Mr. Brown is referred to by the witness, when he says: 'You and Mr. Brown.'

A The Mr. Brown, the gentleman sitting there (indicating).

Q You mean Walter Brown, the General Manager of the Webster Electric Company?

A Of the Webster Electric Company, yes, sir.

Mr. Peaks: All right.

Mr. Williams: Q Now, this conference between Mr. Brown and myself and Mr. Curtis was one at which you were not present?

A No, sir.

Q Was it not?

A I was not.

Mr. Williams: Q Now, where, in this letter, reference is made to Webster agents, and Webster Company, and so on, those references, I take it, are all to the plaintiff corporation here, are they not?

630 (Objection—overruled.)

A I do not know anything as to the details of the history of the organization. What I mean, by reference to the business that Mr. Brown was representing.

The Court: The question is, with whom? Who did you mean by 'Webster people'?

A The Webster Electrical Company.

Q The people who brought this suit?

A It was the company who was manufacturing the Webster oscillator.

Mr. Williams: Q This letter goes on to say that Podlesak had just come from Champlain, Illinois, where they had

been holding a tractor meet, and said one of the Webster agents, he understood, had told him there was a deal on between Webster and Sumter, and that Webster was going to take over Sumter, or vice versa. Did Podlesak say that or substantially that, to you?

A Well, I do not remember now.

Mr. Williams: Q Was the contents of this letter of August 10, 1915 true, at the time you wrote it?

(Objection—overruled.)

A Yes; I never wrote anything that I did not think was true, in my life, that I know of. Whether they were or not, I do not know.

The Court: But you suppose it to be true?

A I supposed that it was the truth, to be true.

Q I am not asking you, Mr. Manning, as to whether Podlesak told you the truth. What I am asking you is whether Podlesak said to you the things that you have quoted him in this letter as having said to you? Did he say those things?

A Well, I am sure he must have told me substantially that, or something to have created the impression of just what I have written here.

Q Now, when, as this letter says, Podlesak said to you that someone had also told him that Williams, Brown, 631 Mr. Webster and a Mr. Becker, were all in New York, and so on, whom did you understand to be referred to as Williams?

A Yourself.

Q And whom as Brown?

A Mr. Walter Brown, of the Webster Company.

Q You mean Mr. Brown who was at that time an officer or the General Manager of this Webster Electric Company to which you have referred?

A I do not know what his official—

Q Well, he was the Brown connected with the Webster Electric Company?

A Yes, sir.

Q And what Mr. Webster was referred to there, as you understood it from Podlesak?

A A Mr. Webster, of the Webster Electric Company. I did not know Mr. Webster.

Q And how as to Mr. Becker?

A Just as it stands. I did not know the gentleman, at all.

Q Did Podlesak say to you that Becker was in some way connected with or representing the Webster Company?

A I could not say.

Q Now, this letter reads in part as follows: 'He says it is the old Varley idea which has been modified to some extent by the original Webster Company's engineer, one Milton, the exploits of whom nearly wrecked the old Webster Manufacturing Company.' Did Podlesak say to you in substance that the exploits of Milton nearly wrecked the old Webster Manufacturing Company?

Mr. Peaks: I object.

The Court: You may answer.

A I do not remember any of the details of that conversation, but I wrote this letter, I am sure, and I must have gotten some such impression as that.

632 Mr. Peaks: I move to strike out the last part of his answer, that he must have got—

The Court: It may stand.

Mr. Peaks: Exception.

Mr. Williams: Q Was it upon your own initiative, and as a matter of your own information, independent of what Podlesak may have told you, at the time of this conference just detailed in this letter, that you wrote that it was the exploits of Milton which nearly wrecked the old Webster Manufacturing Company?

(Objection—overruled.)

A I do not remember. I do not remember that—the fact of the business is, you will have to excuse me, but I was reading something here when you asked that question.

Q Well, the point in question is, whether the matter of these exploits of Milton, to which reference is made in this letter, was a matter which Podlesak had told you of, or a matter of which you knew, and which you of your own initiative, and independent of what Podlesak said, incorporated in this letter.

(Objection—overruled.)

A Well, I did not know anything of Mr. Milton's history at all.

Q So what this letter says relative to Milton is something that you got from Podlesak's conversation with you?

A Evidently.

Q Did Podlesak tell you that under the final adjustment between the Podlesaks and the Webster Company Podlesak's royalties were to be not less than \$5,000 per year, and that they would run to \$12,000 for the year referred to in the letter?

(Objection—overruled.)

A I do not remember that part of the conversation, at all, but I see what is stated here. That is all I know about it.

Q Where this letter refers to 'H. J.', did you mean
633 by that to refer in each instance to Podlesak?

A Yes, sir.

Q Henry Podlesak?

A Yes, sir.

Q Did Podlesak say to you, as stated in this letter, that 'The old Webster Company's experience with Milton's high tension machine cost them many thousand dollars, and that if they have any idea of reviving this machine, it will soon break the present company'?

A I do not remember the conversation in detail, at all; but I wrote this letter, and evidently got that impression.

(Objection—overruled.)

Q This letter refers, a little later, to Clement. To whom did you refer as Clement?

A He was a lawyer in Washington, D. C.

Q Whose lawyer was he?

A The Sumter Electrical Company's lawyer.

Q Now, in this letter you said, 'I think I have scared H. J. pretty well out of the idea of manufacturing his own new machine.' What machine was referred to there?

A He showed me an oscillating magneto, on which there was a magneto, and he called it 'Sylvan,' I think; and he said that that was the machine that he and his brother were preparing to manufacture, and I was very anxious to eliminate that additional competition in that field, and as Mr. Podlesak told me that he was making arrangements to go into the manufacture of this line of oscillating magnetos, and as I realized that would be another competitor in that field, I was particularly anxious to get rid of the Podlesak brothers competition. Later it was agreed that they would stay out of that field entirely for a number of years.

Q Now, how did you scare Podlesak, as you say?
Mr. Peaks: I object.

The Court: He may answer.

634 A Well, I told him a good deal of the Sumter organization, and our ability to manufacture on an extensive scale, and that I did not think that he would be interested in bucking up against that kind of competition, and that I got the idea that he was not as much interested in going into the manufacture of these devices after he heard more of our own organization.

Mr. Williams: Q Now, what did you tell him about your own organization, or what the Sumter Company could do?

A Well, that we were a larger organization than he would be, of course, and he would be a small concern, competing with a larger, and in view of our facilities for manufacturing in larger quantities, that—

Q What—

Mr. Peaks: Let him finish.

The Court: Yes. Let him finish.

A That they would be more interested in getting rid of these devices than they would in manufacturing it themselves.

Mr. Williams: Q What did you tell Podlesak about the size or strength of the organization?

A I do not remember now any of the conversation, but I know that was the impression that I was endeavoring to create, because I wanted to keep him out of that field. As it was, there was the Webster Chicago Company, and ourselves,—the Webster Company manufacturing the Webster oscillator magneto, and the Sumter Company manufacturing the plug oscillator, as we called it; and we had the so-called Van Deventer machine, with the springs mounted on the bracket, and using a different type of magneto from the Webster machine; and I always did feel that if we could secure these rights from the Podlesaks, which I understood they had, which gave them the right to manufacture a machine similar to Webster, that, as I stated later in the letter, if Mr. Brown got too obstreperous, he wanted to
635 eject me entirely from this field, that I would then be in position to manufacture, in addition to the plug oscillator, a machine similar to the Webster, without using a different magneto,—as I think I understood from Mr. Podlesak that the Webster Company had an exclusive license on the tripolar magneto, and of course I could not see anything wrong in going ahead with those negotiations, because they

owned the patents, and they told me that their rights would be clearly set forth in the agreements which they had with the Webster Company, and which of course our lawyers could see whenever it was necessary. I had not seen any of those—

Q Now, you did not say all of that in scaring Podlesak, I presume?

Mr. Peaks: I object.

A Well, I do not think I—

The Court: He does not say that he said it. He says that he had it in mind.

A Yes; I did not tell Mr. Podlesak all that I had in mind. That was evident enough.

Mr. Williams: Q Now, what did you tell him about the strength of your organization, as you say? Did you give him facts, or something that was not facts?

Mr. Peaks: Wait a minute.

A Oh, I never tell anything that is not facts.

Mr. Peaks: Wait a minute. I move to strike that out. I object.

The Court: It is proper for him to state what he said to Podlesak, and what Podlesak said to him.

A Did I not already state that, your Honor?

The Court: Perhaps so. Read the question again, and let us see about it.

Mr. Peaks: How could it be material, what the strength of the organization was? And, if the fact is not material, what figure would it cut that the witness boasted, or bragged, to Podlesak, about it?

636 The Court: It might be quite important, as inducing Podlesak to come in with them.

Mr. Peaks: Well, if they want it on that ground, yes.

The Court: Go ahead.

Mr. Peaks: All right.

A Well, I do not remember any of the details of the conversation that I had with him, what actual words or statement that I made, but I was endeavoring to show Mr. Podlesak that three of us in that field,—there was plenty of business for two, but I did not see where there was for three.

Mr. Williams: Q Well, now, did you tell him anything about how much of that business you could do, or your Company could do?

A No, sir, I am very sure I did not.

Q Did you tell him anything about the financial backing you had?

Mr. Peaks: I object.

A I do not remember that I did.

Mr. Williams: Q Did you say anything to him about the amount of business that you were doing, or the size of your organization, or who were back of it?

A I do not remember that I did.

Q At the date of this letter, that is, August 10, 1915, were you familiar with the negotiations which were pending between the Splitdorf Company and the Sumter Company?

A I knew something about those.

Q Did you say anything to Podlesak about those negotiations, or what would result from them?

A I do not think I did. I do not remember that I did.

Q Did you mention the Splitdorf backing of the Sumter Company, in talking with Podlesak?

A I do not remember that I did.

Q You do not remember that you did not, do you?

A No, sir, I do not.

Q And the fact was that there were negotiations pending?

A Yes, sir.

637 Q. And that the stock of the Sumter Company at that time was owned largely by the same interests who owned the stock of the Splitdorf Company?

(Objection—overruled.)

A Some of the stock was owned by the same interests.

Q By whom?

A Yes, sir.

Q By whom?

A The individual?

Q Yes.

A Mr. Alvord.

Q What proportion of the stock of the Sumter Company did he own at that time?

Mr. Peaks: I object.

A I do not know.

Mr. Peaks: I object.

Mr. Williams: Q Well, was it a large, or was it a small amount?

Mr. Peaks: I object.

The Court: He may answer,—unless he does not know. He may be able to answer this question.

A I do not remember what percentage it was, at all.

Mr. Williams: Q No, I say, was it a large or a small amount?

Mr. Peaks: I object.

The Court: He may answer.

A Well, it was a large amount.

Mr. Williams: Q Was he the largest stockholder, at that time?

Mr. Peaks: I object.

A I do not remember.

Mr. Williams: Q Do you know of anyone else who was as large a stockholder?

Mr. Peaks: I object.

A No, sir.

Mr. Peaks: Wait a minute.

638 The Court: He may answer. He has answered?

The Witness: Yes.

The Court: It may stand.

M. Williams: Q. You are connected now with the Splitdorf Company, are you not?

A Yes, sir.

Mr. Williams: Q Are you an officer of that corporation?

A I am a director.

Q Is Alvord a stockholder of the Splitdorf Company?

A Yes, sir.

Q Is he the largest?

Mr. Peaks: I will admit that Mr. Alvord is the controlling spirit.

A I do not know.

Q Do you know of any larger?

A I do not know of any—I mean, I think you are trying to get me to admit there that he is. I do not know that he is, or is not.

Q Now, this letter, after saying that you had scared H. J. pretty well, says that from what you could get out of him today, 'it appears that he has the right under his agreement with the Webster Company to manufacture any of the Podlesak outfits himself, or to sell his patents, with this right to manufacture and sell without interference from the Webster Electric Company. Brown would probably dispute this.' Is that the substance of what Podlesak said to you?

A I imagine—I presume it is, yes, sir, whatever I wrote there.

Q And this Brown is the same Brown that you previously referred to?

A Yes, sir.

Q Did you learn at the time of this conversation with Podlesak which is detailed in this letter that a bill of complaint had been prepared or executed to be filed in the interests of the Webster Company and against the Sumter 639 Company with which you were connected under the Podlesak reissue patent involved in this suit?

A I don't remember that I did.

Q Did Podlesak tell you that at that time?

A I don't remember that he did.

Q When did you first learn of the suit commenced by the Webster Company against the Sumter Company at Charleston, South Carolina?

A I don't remember.

Q Was it before or after September 4, 1915?

A Well, if I heard it at all I should think it would be before. But those are matters that I was not handling and did not—I was not very familiar with them.

Q You don't remember now?

A I don't remember that I heard it, no. Perhaps it was not until Mr. Van Deventer and Mr. Clement came up here.

Q When was that?

A That is about the last of July; the latter part of July.

Q 1915?

A Yes, sir.

Q And at that time you may have learned of it?

A Yes, sir.

Q Do you know how you first learned of it?

A No.

Q Whether it was from Van Deventer, or by letter or how?

A No, I don't remember.

Q What did you mean in this letter of August 10, 1915, when you said, 'Now, if Mr. Brown, the Webster people, gets too obstreperous'; what did you mean by 'getting too obstreperous'?

(Objection—overruled.)

A Well, I already referred to that, your Honor, in a previous answer, and said that what I had reference to was

Mr. Brown's objecting to my activity in the field, in the stationary engine ignition field.

Q Did you have in your mind the bringing of a suit 640 at the time you used this phrase in that letter?

A No, sir. I was no more— What I had reference to and the impression I had was, in using that phrase, was his objecting to our activities in the stationary engine ignition field.

Q The bad feeling between Brown and Podlesak to which you refer in this letter, was that bad feeling a matter which Podlesak told you about, or something that you knew about independently of his conversation with you?

A No, I don't remember just now or what time I heard it, but I understood there was some bad feeling and that Mr. Emil Podlesak had been discharged from their business.

Q When in this letter you say that 'H. J. and Emil will be in the frame of mind to consider such negotiations with us as would let us right into the Webster business,' what did you mean by letting yourselves right into the Webster business?

A Well, I meant that if we bought any rights which they had under the machine, that Mr. Podlesak showed me and which he was preparing to manufacture, that in addition to our line of oscillators it would give us the right also to manufacture a Podlesak bracket like he showed me, a magneto known as the Sylvan, as he called it, and that that magneto was very similar to the Webster magneto; and that we would then not only have the right to manufacture the plug oscillator to ourselves but the other type of machine as well, if not the tri-polar magneto as Mr. Podlesak had explained to me that Mr. Webster had the exclusive license on it.

Q When you referred to letting yourselves into the Webster business, you were referring, as I see it, to yourselves?

A As I said,—

Q Just a minute. When you say here that—When you refer to letting yourselves into the Webster business, I understand you now to say that you meant this Sylvan machine which the Podlesaks had gotten up, which he showed to you.

641 A I simply mean this, Mr. Williams: It would let us into the field which they were occupying with another type of magneto than our own; we had the plug oscillating magneto with the springs in the bracket, and using the rotary type on the bracket so that we made an oscillator, and things of that kind. If we had the Sylvan machine, we would then

be in position also to have a machine that would be of a different type from the plug oscillator we had with the springs on the bracket of the magneto—I mean, on the plug itself. But I should have said there—I mean, I could have expressed my meaning, I think, more clearly had I said the Webster field rather than the Webster business.

Q That is, you could let yourselves right into the Webster field?

A Yes, in the field. You know, those are terms that are used by salesmen very often without considering their technical significance,—As meaning class of trade that they were handling, the stationary engine field.

Q And it was in your mind that you could go into that field or that line of business with this Sylvan machine, with the plug oscillator? That is, that the Sylvan machine would put you in position to cater to that trade?

A We were already catering to that trade; we were handling it very satisfactorily. But our machine was different entirely from the Webster machine, and if, for any reason, we wanted to manufacture both types of machine, why, we would then be in position to do so. But as a manufacturer, I naturally would not want to manufacture two types of any model that one type would handle, because we understand in a manufacturing business you want a large production in as few models as possible.

Q Do you mean to say that your plug oscillator would fill the same market exactly as the Webster machine if you had seen fit to use it for that purpose?

A It was already filling a field which was in competition with the Webster machine, selling to the same customers for use on the same machines.

The Court: That is, salable to them for the same purpose?

The Witness: It would be salable to any manufacturer of stationary engines just as the Webster machine and as any other magnetos are interchangeable.

Mr. Williams: Q So that where you referred here to letting yourselves right into the Webster business, you meant letting yourselves into the same market?

A Yes.

Q Putting yourselves in the same market?

A Yes. In other words, with a different type than we already had.

Q So that you would have the two types to cater to the same market?

A Exactly so.

Q The next phrase of this letter is, 'And with their line and the plug oscillator we sure would be in shape to command the field'; what did you mean there when you said 'with their line'?

A With their peculiar type of machine.

Q The Webster, or the Podlesak?

A Well, it is all the same.

Q Was the Sylvan the same as the Webster?

A Except that the magneto was made with two poles instead of three; that is the only difference I knew anything about.

Q And when you referred there to 'their line,' did you refer to 'their,' the Webster Company line?

A With a line similar, yes. A machine which would be the same machine with a different magneto, see? A two-pole magneto instead of a three.

Q The sentence reads here this way: 'I think H. J. and Emil will be in the frame of mind to consider such negotiations with us as would let us right into the Webster business, and with their line and the plug oscillator we sure would be in shape to command the field.' Now, does that 'their' mean Webster or not?

A Well, it means the type of machine, their line; it means the type of machine similar to theirs.

Q To the Webster?

A Yes. Mr. Podlesak had made it very clear to me that he could not manufacture the Webster machine.

Q When the negotiation which you later had with the Podlesaks was concluded and it came to the matter of paying them some money, whose check was it that made the first payment to the Podlesaks of \$25,000?

The Witness: Splitdorf Electrical Company.

Mr. Williams: Q How was that check made payable?

A F. C. Manning.

Q That is, to you?

A Yes.

Q And it was by you endorsed, was it, and paid to the—delivered to the Podlesaks?

A Yes, sir.

Q The assets of this Sumter Company of which you were an officer in August, 1915, were sold in toto to the Splitdorf Company at about that time. were they not?

A Just a little later than that, I think.

Q Was there, on the 22nd of August, 1915, a meeting of the stockholders of the Sumter Company to confirm a sale to the Splitdorf Company of all of these assets?

(Objection and discussion, no answer to question.)

Q At any rate, prior to the consummation of your negotiations with the Podlesaks on September 4, 1915, the negotiations between the Sumter Company and the Splitdorf Company had been concluded, had they not, so that what more was to be done was simply in carrying out what had been arranged or agreed upon?

644 (Objection.)

The Court: Q Have you the date in mind?

The Witness: No, sir, I have not. They are all matters of record and I don't remember the date.

The Court: I think they can supply them. Mr. Peaks will supply them.

Mr. Peaks: I will try to.

Mr. Williams: Q Whom did you represent in your negotiations with the Podlesaks, all of them?

A Well, I don't know who I represented. I did not stop to consider that; just went ahead with the thing.

Q Were you representing some one?

A I was employed by the Sumter Company; I was a member of the Sumter Company?

The Court: Then you represented them?

The Witness: Yes, sir.

Q Did you represent also the Splitdorf Company?

A No, sir.

Q Whom did you represent when you paid to the Podlesaks the Splitdorf Company's check which was made payable to you and endorsed by you and handed to the Podlesaks? Whom did you represent in that part of the transaction?

A I don't know.

Q Where did you get the check?

(Objection—Overruled.)

A The check was handed to me by the Splitdorf Company.

The Court: It was not drawn by you?

The Witness: No, sir. It was made payable to me.

Mr. Williams: Q You had a meeting, did you not, with the Podlesaks, on August 20, 1915, here in Chicago?

A About that date. I am not certain of the dates.

645 Q What is the date of the option that you took from the Podlesaks? Do you recall that?

A No, sir, I do not.

Q Have you got that option?

A No, sir.

Q Who has it?

A I don't know.

Q What did you do with it?

A It was handled by the attorneys.

Q The option ran to you, did it not?

A Yes, sir.

Q To consummate some contract?

A It was in my name, yes, sir.

Q Was it delivered to you?

A I don't—

Q —by the Podlesaks?

A Well, the attorneys handled it. I was only the fellow who signed it, or did whatever the attorneys told me to do; you know how those transactions are handled.

Q Do you know where that paper is now?

A No, sir, I don't.

(Discussion between counsel as to present whereabouts of option, defendants' counsel agreeing to make inquiry about it.)

Q At the time that option was signed and delivered you had a meeting, did you not, in Great Northern Hotel here?

A Yes.

Q And there was present whom besides yourself?

A Mr. Van Deventer, and Mr. Clement, and Mr. Henry Podlesak. And later Mr. Emil Podlesak.

Q At the time of that meeting with the Podlesaks 646 and at which the option running to you was signed and delivered, did you know that the Sumter Electrical Company was in process of dissolution and that that dissolution had been approved by its stockholders at a meeting held prior to that time, and that the Splitdorf Company was taking over, or had taken over, or was in process of taking over, the assets and the business of the Sumter Company?

(Objection—Overruled.)

A I knew there was a transaction pending but what its status was I did not know.

Q You yourself were one of the trustees to whom this property was transferred or by whom it was held during the course of the dissolution, were you not?

A I think I was.

Q Did the Sumter Electrical Company of South Carolina, of which you were an officer and a director, in August and September, 1915, did they ever put a dollar of money into

the purchase or whatever may have been acquired or attempted to have been acquired from the Podlesaks by this instrument of September 4, 1915?

(Objection, and discussion between counsel as to the date at which the Splitdorf Company first participated in the negotiations with the Podlesaks. Objection overruled.)

A I think they did.

Q When did they put money into that purchase?

A When they secured the option?

Q That is the option which ran to you?

A Yes.

Q How much did they put in them?

A I don't know.

Q What?

A I don't remember.

Q Who paid the money?

647 A One of the lawyers.

Q How was it paid?

A I think by currency.

Q Did they ever put anything—What was that, some payment of a dollar or something of that sort?

A More than that, I think, but I don't remember what it was.

Q A trivial sum?

A Yes; it was small.

(Objection to question and answer—overruled.)

Q Aside from that payment of earnest money, as I understand it, by somebody who was present at this conference at the Great Northern Hotel at the time the option was executed and delivered, did the Sumter Company ever put a cent into this—pay a cent of consideration for this contract of September 4, 1915?

(Objection—overruled.)

The Witness: Well, Judge, I didn't handle it, and I really don't know.

Mr. Williams: Q As an officer and director you never heard of any further or other payment being made by the Sumter Electrical Company to the Podlesaks, did you?

A Well, I never heard of it, but it may have been done.

Mr. Peaks: Let me make this admission. If counsel does not agree with it, it won't do any harm. The Sumter Company paid \$25,000 to the Podlesaks, and the Sumter Company borrowed the \$25,000 from the Splitdorf for that purpose.

The Court: That is an admission that is material. That is material.

* * * *

The Court: Let me ask you whether the Sumter Company secured the payment of the loan.

Mr. Peaks: By taking an option.

The Court: By a note or anything?

Mr. Peaks: By taking the option and the contract in 648 favor of both jointly.

The Court: Did they give any note for the \$25,000?

Mr. Peaks: That I don't know, but I will inquire and tell your Honor.

The Court: All right.

Mr. Peaks: Possibly the witness will know, I think Mr. Van Deventer will know.

The Court: Q Do you know anything about it, Mr. Manning?

The Witness: I know nothing about it.

The Court: He doesn't know anything about that, he says.

Mr. Peaks: I understand, Mr. Sturtevant tells me—I didn't know it when your Honor asked me—I understand that they gave notes.

The Court: They gave notes?

Mr. Peaks: That is my information.

Mr. Williams: If they gave them, can you show them?

Mr. Peaks: I couldn't. I never heard of them before.

The Court: If you can produce them we would like to see them.

Mr. Peaks: Whether they are at Sumter or at Newark, or where they are, I don't know.

The Court: They know over there.

Mr. Peaks: They will know over there and we will tell your Honor when we come back after lunch.

The Court: Yes, all right.

Mr. Peaks: If they are in existence they shall be here before this case is ended.

* * * *

Cross-Examination by Mr. Peaks.

Q Mr. Manning, you were asked on your direct examination whether you knew of the fact whether Mr. Emil Podlesak had been discharged by the Webster Electric Company, something about that. Did you learn, or did you under-
649 stand, or did you come to know what the circumstances

leading to the severance of his relations with the Webster Electric Company were?

(Objection—overruled.)

A No, sir; I did not.

The Court: He didn't know anything about that.

Mr. Peaks: Q Did you ask any questions of them about that?

(Objection—overruled.)

A I don't remember that I did.

Q You say that Mr. Clement was the lawyer for the Sumter Company?

A Yes, sir.

Q Mr. Clement was a lawyer who devoted himself, did he not, exclusively to patent practice?

A That is all, yes, sir.

Q That is, he was the patent lawyer of the Sumter Company?

(Objection—overruled.)

A Only in connection with patent work, in connection with Mr. Van Deventer's patent work. I understood in these matters he was perhaps an associate with Mr. Van Deventer in the patent work that he handled.

Q That is, he was Mr. Van Deventer's patent counsel?

A Yes, sir.

Q Did you understand during the times referred to, that when you were dealing with the Podlesaks you were dealing with the men who dominated and were in your trade recognized and conceded to dominate the right to this bracket feature of the device?

(Objection, sustained, exception. Discussion between court and counsel.)

650 Mr. Peaks: Q Then, about the letter that you wrote to Mr. Van Deventer, do you know if he ever got it or not?

A I only know that he has told me several times that he never got it.

Q He never acknowledged it?

A No, sir.

Q He never answered it?

A No, sir.

Q You say that you represented the Sumter Company. When did you first represent the Splitdorf Company? When did you first draw any salary from the Splitdorf Company?

(Objection, discussion, withdrawal of question.)

The Court: Can you tell when you first represented the Splittorf Company?

A Technically I don't see how I can.

Mr. Peaks: Q Do you know when, have you any recollection at all as to the date when any Sumter stockholders' meetings were held, looking toward the dissolution of that company, or not?

A No, I do not remember the date.

Q Do you remember whether August 20, 1915 was the date that you took the original option from the Podlesaks, or do you or don't you?

A I am not definitely sure of the date. It was about that time, I am satisfied.

Q When you said you were one of the trustees of the Sumter Company, you meant you were one of the liquidating trustees appointed under the South Carolina statute; that is right isn't it?

A That is all, yes, sir.

Q Who were the others?

The Court: I notice in the Splittorf contract the option is cited as dated August 20, 1915.

Mr. Peaks: Q Was it taken on the day it bears, whatever it was, Mr. Manning?

651 A Absolutely.

(Discussion between counsel and with the court respecting the date of the option.)

Q You were asked something about the payment of the consideration for the option, or what was paid, and whether it was trivial, or whether it was substantial, something of that sort. Do you remember what the amount was, or not?

A No, I do not.

Q Well, was it a dollar or was it \$25,000, or anything in between or more or less?

A I think it was less than \$100.

Q What?

A I think it was less than \$100.

Q That was for the original option?

A Yes, sir.

Q When that option was exercised and the contract was closed, do you remember what was paid?

A \$25,000, I believe.

Q That is according to the terms of the contract, that is recited in the contract, as I recollect it?

A Yes.

Q And that initial payment mentioned in the contract of \$25,000 was actually paid, was it?

A Absolutely.

Q By whom? That is, by what individual? By you?

A By myself.

Q Yes. You paid that, as I understand it, with the Splitdorf Company's check to you?

A Yes, sir.

Q Do you know whether it is a fact that the Sumter Company gave its notes to the Splitdorf Company for that \$25,000 and paid interest on the notes?

A I don't know how it was handled. I know there was some—

652 Q Well, you knew you got the Splitdorf check?

A Yes, sir.

Q You were an employe of the Sumter Company?

A Yes, sir.

Q Who arranged that for you, who sent it to you, or how did it come to be sent to you? You didn't borrow it; you didn't get it. Now, who caused it to be put in your hands?

A Mr. Alvord.

Q Mr. Alvord, and he was—

A Stockholder of the Sumter Company.

Q Of the Splitdorf Company?

A And stockholder of the Splitdorf Company, both.

Q Do you remember who signed the check of the Splitdorf Company?

A Signed by its treasurer.

Q Do you know how the matter was treated, as a matter of bookkeeping, or evidence of indebtedness, or security, or the payment of interest, or anything else? You don't recall that?

A No, I don't.

653 E. J. KANE, recalled, testified as follows:

Direct Examination by Mr. Williams.

Witness produced a sample of a plug member which he stated was substantially identical with the old plug which was installed on an engine when the magneto marked Plaintiff's Exhibit 11 was used, and demonstrated how it was assembled in relation to the magneto by placing it in the same relation to it as shown in the booklet Plaintiff's Exhibit No. 13. The plug was offered in evidence as Plaintiff's Exhibit No. 11A.

H. R. VAN DEVENTER recalled on behalf of plaintiff, further testified as follows:

Direct Examination by Mr. Williams.

Witness heard the testimony of Mr. Manning relative to his letter of August 10, 1915 to the witness. Asked when he first saw the original of that letter, witness testified:

A I do not know. It was several weeks after it was written, quite a long time, in fact,—if I ever saw it; I do not remember that I ever saw it.

Q When were the contents or the substance of that letter first communicated to you, and how?

A Why, I went up to Newark sometime about the 10th or 11th.

Q Of August, 1915?

A Of August, 1915; and went from Newark to Chicago; and I saw Mr. Manning, and he told me that he had written such a letter; and we discussed the contents of it.

Q Whom were you interviewing at Newark?

A Mr. Curtis.

Q Of the Splittorf Company?

A Yes, sir.

Q When did you first learn of the fact that a bill of 654 complaint filed, or executed,—verified, on behalf of the Webster Electric Company, for the purpose of commencing suit against the Sumter Company of South Carolina, at Charleston, South Carolina, had been signed? When did you first learn of that fact?

A Sometime, when I was in Newark, our attorney in Sumter telegraphed that a suit had been filed. I could not identify it as that suit, but he just telegraphed me that there had been a suit filed, a suit brought against us.

Q That was while you were in Newark, immediately after the 10th of August, 1915?

A Yes, sir.

Q When was it, following your trip to Newark, on the 10th of August, that you first came to Chicago?

A Well, it was immediately after, a few days; I do not recollect; perhaps the 15th, or perhaps the 16th.

Q You heard Mr. Manning's testimony about a conference at the Great Northern Hotel as the result of which an option was executed, did you not?

A Yes, sir.

Q What was the date of that conference at which the option was executed?

A I think that was August 20th.

Q 1915?

A Yes, sir.

Q You knew of the commencement of the suit by the Podlesaks and the Webster Company, against the Sumter Company, at Charleston, South Carolina, before you arrived here in Chicago, and during which time you had this conference on August 20th, 1915, did you not?

A To the extent that I have told you,—that I had gotten the telegram from the lawyer.

655 Q Mr. Clement came with you to that meeting here, at Chicago, on the 15th of August, or following that, and concluding on the 20th of August, 1915, did he not?

A Yes, sir.

Q Where did you join him to come here?

A I think he met me in,—I think he met me in Newark.

Q In Newark?

A I am not sure. I might have gone to Washington, and picked him up, and gone from Washington to Chicago. I often did that.

Q What was the occasion of your coming on to Chicago at that time with Mr. Clement?

A Why, we were having some general discussion in and about the matter of a Milton patent, which was not the one in this present suit, but another Milton patent, about which you and Mr. Brown had gone to Newark, and had threatened suit on there against the Splittdorf Company.

Mr. Peaks: Q When you say 'you,' whom do you mean?

A Mr. Lynn Williams.

Q The counsel examining you?

A Yes. And I had gone out here to find out, out here, what we could around and about that patent, if I recollect the matter right, at that time. I think that was the main purpose of that visit.

Mr. Williams: Q What did you do here, in following up that matter, to learn about the Milton patent?

A Why, I think we had some talk with Mr. Henry Podlesak about it; I do not recollect who else; two or three people here, I believe.

Q That is what you came for, when you started?

A I think that was the principal thing at that time. There

might have been something in connection with this plug oscillator business.

Q Now, had you at the time you and Mr. Clement 656 started for Chicago seen a copy of this letter from Manning, dated August 10, 1915?

A Not that I recollect.

Q Well, do you swear that you had not seen it?

A No. It might have been sent to me at Newark, and I might have read it, as I would twenty other pieces of mail that would come into my office.

Q But, at any rate, that had nothing to do with Clement, coming on here to Chicago?

A Nothing whatever that I can recollect.

Q Now, when, how soon after you got to Chicago here did you see the Podlesaks, or either of them?

A Well, I do not know exactly, but almost immediately; two or three days, perhaps.

Q And then you conferred with them on more than one occasion, did you, before the 20th of August?

A No, never before that time. The time we met them in the Great Northern Hotel was the first time I had ever seen either one of them.

The Court: Q You did not meet Henry in regard to the Milton patent, then?

A Prior to—

Q Except at that time?

A That is all, yes, sir.

Mr. Williams: Q Now, who was it, if you know, that arranged that conference at the Great Northern Hotel on August 20th?

A Mr. Manning.

Q And at the time, then, of this conference, at which you participated with the Podlesaks, on August 20, Manning had by that time communicated to you the substance of the matters which he detailed in this letter of August 10, 1915, had he?

A I think so, substantially so.

Q Well, that is your recollection, is it not?

657 A Not all of them, because I do not think that some of the matters that are mentioned in the letter were ever referred to at all, between us.

Q Which matters?

A Well, the matters of the general business, the business conditions. I was more particularly interested at that time in the patent end of it; and he told me that the Podlesaks

knew about these patents, and about this magneto art, and I think that nearly all of my time with Manning was confined to that phase of the matter.

Q Then, until you met the Podlesaks, there were certain matters detailed in this letter concerning which you had not talked with Manning; is that right?

A I think so. The general situation in regard to the business and the gas engine field, I do not remember discussing at that time with him. That was his end of the business.

Q Can you refer to the parts of this letter of August 10, 1915, which is Plaintiff's Exhibit 61, the parts that had not been brought in any way to your attention before meeting the Podlesaks on August 20, 1915 (showing Exhibit 61 to the witness)?

(Objection—overruled.)

A Well, we did not discuss anything about this Milton agreement that he refers to in here; and we did not discuss anything about Milton's high tension machine and the Webster Company. We did not discuss anything in relation to the Webster business, that is referred to in here. I think that is about all that we did not discuss, that I can recollect of.

Mr. Williams: Q These Milton matters referred to in this letter, and to which you just called attention, they were the matters upon which you say that you and Clement started on here, out to Chicago, were they?

A I think so, yes, sir.

Q But after you got here you did not talk about them?

A Oh, yes. We talked—

658 Q With Manning?

A Well, we talked with Mr. Manning, and— We talked with Mr. Podlesak; not with Mr. Manning. We asked him about the patents, and what he knew about them.

Q I did not get the last.

A I say we asked him what he knew about the patents, and the early art, around and about that type of machine that is shown in that Milton patent.

Q Now, when you talked with Podlesak at the Great Northern Hotel on August 20, 1915, you knew, I presume, that one of the patents relative to which you were negotiating was the patent on which the suit had been commenced against your Company, at Charleston, South Carolina, did you not?

A I presume so.

Mr. Peaks: I object, and move to strike the answer out. If the witness knows, he should state, and—

The Court: You should give us a definite answer, if you can.

A Why, I thought it was one of the Podlesak patents, but I did not know which one, or whether it was one that I had never heard of before or not. The only knowledge that I had was that we had been sued under a patent.

Mr. Williams: Q Did you talk with Podlesak, or either of the Podlesaks on August 20, 1915, about the patent upon which suit had been commenced, or about the fact that a suit had been commenced against your Company, at Charleston?

A Yes. Yes, that I think was mentioned; I do not think it was discussed at any great length.

Q Now, do I understand you to say that, although you were negotiating with the Podlesaks on August 20th, and although you knew the suit had been commenced against you at Charleston, that you did not then know that one of the patents about which you were negotiating was the patent on which the suit had been commenced? Did you connect those two things at that time, or not?

659 A I understood you to say, did I know prior to that time, prior to that time, that that was one of the patents. I knew that—

Q I did ask you that sometime ago, but now I am asking you whether or not you knew on August 20th, when you were talking with the Podlesaks, about the matter which culminated in the option executed on that date, that the option included in some way the patent upon which your Company had been sued at Charleston?

A Certainly I knew it.

Q Did you, in a suit in the District Court of the United States for the Eastern District of Wisconsin, in which Emil Podlesak was plaintiff, and Webster Electric Company was the defendant, give a deposition at Sumter, South Carolina, beginning on the 24th day of May, 1917, and did you in that deposition make the following answers to the following questions:

‘Q Are you supplying them with a plug oscillator in connection with any other equipment of any kind, a so-called plug oscillator?

‘A Not from these works, and I understood your former question to apply to what was furnished from these works.

‘Q Then the device shown by Figure 1 is supplied to Fairbanks, Morse & Company, but not from Sumter?

'A Yes, sir.

'Q And it is assembled in Chicago, and supplied by the Sumter Electrical Company of Illinois; is that what you mean?

'A No, sir. The history of that device there, Figure 1, as shown on page 38 of the booklet, is this,—that the magneto proper was manufactured at Sumter, and was shipped to Chicago, and the balance of the equipment making up the complete device was manufactured in Chicago, the magneto mounted thereon, and the complete device shipped to the Fairbanks, Morse Company.

660 'Q Then the plug oscillator part of the device was made in Chicago?

'A Has been, up to the present time.

'Q On August 20, 1915, when this meeting was had to which I have reference, were the facts as to the device shown at Figure 1 the same then as you have described?

'A If we were making them at that time, yes. Perhaps I can save some time in this examination by stating that we have never shipped any of the devices known as the plug oscillator from Sumter to any customers, with the possible exception of perhaps twenty-five or thirty machines.

'Q You mean the Sumter works?

'A Yes, sir.

'Q The facts, however, as to the supplying of this device to the trade with reference to the assembling in Chicago, are as you have previously stated?

'A Yes. We located a man in Chicago who could undertake the manufacture of the device, comprising bracket and igniter mechanism, and he made this under our authority and by our direction, in Chicago, our purpose being to save freight.

'Q Whom do you mean by "our"?

'A The authority, first, of the Sumter Electrical Company of South Carolina, and, after the dissolution, of the Sumter Company, by the authority of the Splittorf Company.'

The question is whether you so testified in this deposition, in the suit to which I have referred?

(Objection, followed by discussion between counsel and with the court wherein it developed that in a stipulation between counsel it had been agreed that depositions taken in the case of Emil Podelsak v Webster Electric Company might be offered in evidence in this case without certification or verification.

661 The Court: I think, Mr. Williams, it would be perfectly proper to let your question, repeating these questions and answers, stand as your offer, subject to correction, of that testimony; you offer that much from the deposition.

Mr. Williams: Well, I so offer it.

Mr. Peaks: I object to it.

The Court: That is proper, under the stipulation, as I understand it.

* * * *

Mr. Williams: Q In this same deposition, to which I referred in my last question, appears the following, in the form of question and answer:

‘Q Did you produce the correspondence that I asked for at the last hearing?

‘A I have made a search of my files, and find a letter from Mr. Manning, dated August 10, 1915, a true copy of which I herewith produce. (Letter marked for identification with the initials of stenographer, “E. M. D.”; the same here incorporated in the record, and returned herewith, as follows:

“Copy

To Sumter Works

August 10, 1915

“H. R. V.

“Subject: Patent Matters.

“Dear Van:”—

And then, following, a letter identical with the copy which is marked Plaintiff’s Exhibit 61 (handing exhibit to the witness), and signed “F. C. M.”; then, following, a question, reading:

“Q Is this the only correspondence that you have relative to this subject?

“A That is the only correspondence I can find that relates to the Podlesaks, and those contracts and patents.

“Q Have you a copy of the answer which was sent to this letter?

662 “A No, I have not, and it does not appear that there ever was an answer sent, because I went out there immediately after that time; I was in Chicago within a week or ten days after that; in fact, I was there on August 20, 1915, and this matter was verbally discussed and settled.

“Q But you have said in this examination that you were in the North, and were told to go to Chicago, and take up this matter with the Podlesaks. Is that because this letter was received in your absence, and word sent to you?

"A I think so. I do not think I was in Sumter when this letter got there. Whether I came there between the 10th and 20th of August, I do not know.

"Q What would be the custom at your office with reference to a letter of this kind? Would a wire be followed by a copy of this letter to you?

"A If I were going to remain very long, it would but I do not generally stay very long; they would probably wire me the substance of the letter.

"Q And then when you got back to Chicago you would see Mr. Manning, and whatever was in this letter would be discussed with you then?

"A Yes, sir."

Now, did you so testify, in the suit which I have entitled?
Mr. Peaks: I object.

The Court: You may offer that in evidence. That is the same deposition.

(Discussion between counsel and with the court.)

The Court: The objection is sustained. You can put it in just as an offer.

Mr. Williams: Then we offer it as an admission.

The Court: It amounts to the same thing. There are 663 two different ways of getting at the same result."

Here ensued a discussion between counsel with respect to a check signed by the Webster Electric Company and payable to the Splitdorf Electrical Company, produced by plaintiff's counsel and submitted to defendants' counsel, as a result of which discussion defendants' counsel, Mr. Peaks, was called to the witness-stand by plaintiff's counsel.

GEORGE H. PEAKS called as a witness on behalf of plaintiff, testified as follows:

Direct Examination by Mr. Williams.

Age 46, residence, Evanston, Illinois; occupation, attorney-at-law.

The witness further testified:

Q Will you look at this paper, and say whether you can identify it?

(Check shown witness.)

A I cannot.

Q You cannot?

A There is no distinguishing mark by which I can identify this particular paper. I can testify that it appears to be, and I believe it to be one of the checks, one of the series of checks issued by the Webster Electric Company of West Virginia to the order of the Splitdorf Electrical Company, which have been sent to our office, and have passed through my hands. Does that answer your question?

Q Let me ask you whether this particular check which you hold in your hand is a check which was received in your office in due course of mail following the 13th of January, 1919?

A I do not recognize it, but I have no doubt of it. There is nothing on it by which I could identify it. Such a check was received; whether for this amount, or whether this 664 is the particular piece of paper, I could not say. I know that one came in.

Q At about that day?

A And was on my desk, about the 14th or 15th of this month,—from the Webster Electric Company; and I told our bookkeeper to send it through in the usual way; and I have no doubt this is the paper.

Q You mean the 15th of January, rather than of this month?

A Yes. It was a day or two after we started the trial of this case, which I think was the 13th. I have no doubt this is the paper.

Q Now, the check which you say was received from the Webster Electric Company in your office on about the 15th of January, that was forwarded by whom, or to whom did you give directions that it should be forwarded?

A Well, I found it on my desk, with the morning mail, and I have no doubt it was received from the Webster Electric Company, as it always had been, from their office in Racine; at least I saw such a check on my desk, and turned it over to our bookkeeper, and I said, 'I haven't got time to attend to this; send it through in the usual way.' I do not find myself able to say that this is the piece of paper. I have no doubt that it is, if you say so. Mr. Brown would know.

Q And to whom was the bookkeeper in the regular way to send that check?

A Oh, I do not know. I suppose to the Splitdorf Company, yes,—at least, that is my assumption. There is no doubt about that, Mr. Williams.

The Court: Q Who is the payee in the check?

A The Splittdorf Electrical Company.

Mr. Williams: Now, I think I will offer the check, and ask that it be marked as Plaintiff's Exhibit No. 63.

665

DEFENDANTS' EVIDENCE.

JOHN LEWIS MILTON called as a witness on behalf of the defendant, testified as follows:

Direct Examination by Mr. Bulkley.

Residence, Cleveland. Was never in the employ of the Webster Electric Company, but was in the employ of the Webster Manufacturing Company, beginning about the fall of 1905. The company was then engaged in the manufacture of elevating and conveying and power transmitting machinery, gray iron castings, large castings. Prior to entering the employ of the Webster Manufacturing Company witness had been engaged in the manufacture of dynamos and motors and ceiling fans for a number of years, beginning in 1897. When witness first went with the Webster Manufacturing Company he went there primarily to sell an ignition device known as the auto-igniter. The Webster Manufacturing Company held some patent rights under patents controlled by a man by the name of Curtin, which appeared to be a promising device. They covered inductor alternators for ignition apparatus. Witness was developing a machine of his own which was the result of some experience he had had with gas engines prior to that time. When witness learned that the patents mentioned were under the control of the Webster Manufacturing Company he went with that Company in Chicago and told Mr. Webster that he was interested and wanted to make some arrangement to link up with him on the development and sales of that work. That was Mr. T. K. Webster. Mr. Webster was interested and at once went with witness to the International Harvester Company, to a man by the name of Cowen, who was in the Sales Department. The first work witness did in connection with the development of the Curtin magneto was to offer it to

the International Harvester Company, and they refused 666 it. Being asked how he happened to offer it to the International Harvester Company except through the Webster Company, witness testified:

A I didn't, Mr. Webster took me down there to talk with these people with the idea of finding out about how much I knew about it, and that day he made me a proposition to take hold of the sales, and very shortly after that I started in on the sales work and found that it was not a salable apparatus; that is, at least to the Harvester Company.

Q Did you take it up with the Harvester Company to determine whether it was a salable apparatus or not?

A I was directed by Mr. Cowen to take it up with the Harvester Works at Milwaukee. He instructed me or gave me a letter or a card.

Q Never mind about that. Just tell what happened at the International Harvester Company.

A It was offered to a man in charge of their experimental work, Mr. Podlesak, Mr. Henry J. Podlesak, who had had experience with the machine, and finally he rejected it, or rather would not accept it. He showed me the mechanical weaknesses of it. Then I started my development, after having told Mr. Webster what these troubles were.

Q About how long were you before you commenced to start your development after you had gone with the Webster Manufacturing Company in 1905?

A Oh, about, I fancy about a month after that.

Q Then what happened? Just go along quite generally, Mr. Milton.

A The result of it was that I developed a machine that overcame the—most of the objections. It was offered to the Harvester Company and later on was offered to the Fairbanks Company.

Q Is that what you call a low tension or a high tension magneto which you were then working on?

A It was a low tension rotary magneto which was to be built into the engine. It was not a separate self-contained 667 device. We put a part of it under the main crank shaft. That was the rotor. The stationary part was bolted to the frame of the engine in one of several different ways.

Q Just tell me, Mr. Milton, what the condition of the art was at that time. Whether these magnetos were generally used on harvester engines or stationary engines at that time.

A At that time I do not recall of anybody using magnetos of this type on any stationary engines in this country.

Q What type do you mean when you say 'this type'?

A I mean that type of magneto where there would be an impulse or current generated at the time that ignition was required. There were other little magnetos. They were called magnetos, but they were magneto dynamos that ran at high speed, ran off the fly wheel of the engine, ran by a belt, and they were being used, but they were very troublesome for many reasons. They were a bit better than batteries if you could get started on them.

Q Were batteries used at that time quite generally for ignition?

A Almost universally.

Q Go right along and tell us what further—

A They were a source of a great deal of trouble.

Q Yes.

A We found all the engine manufacturers very much interested in getting an electrical, an electric generator or magneto that would do away with battery troubles. So the development progressed. This machine was, this machine that I have mentioned to you, was offered—

Q A little louder.

A —was offered to the International Harvester Company. Again it was not approved, and in the year of 1906 the Fairbanks Company used a few of them.

Q Now, when you say 'the Fairbanks Company,' you mean the Fairbanks, Morse Company?

A The Fairbanks Company is different from the,—
668 a different company from the Fairbanks Morse Company.

Q Oh, all right.

A The Fairbanks Company is a sales company in New York that had their engines manufactured for them under contract. At that time the Field-Brundage Company of Jackson, Michigan, were making their larger horizontal engines, and Bates & Edmonds of Lansing, Michigan, were making their smaller vertical engines, and we submitted samples to both of these companies. The Field-Brundage Company used them on their engines in connection with batteries. That is, they used a battery for starting the engine, and then switched it over to the magneto and they would run continuously under magneto, and they had very good satisfaction, and that developed into a very good business, and I heard promptly of Bates & Edmonds, and I got up another type of magneto,

which was known as our type 'C,' as I recall it, 'C' or 'C-1.' That was built into the fly wheel. It was built large and square and very flat, so that it could go on the fly wheel without discommoding the rest of the machinery, the rest of the engine, and that developed into the best business that we had with the Fairbanks Company. Later on there was some complaint about the starting of this engine.

Q What year was that when you got that business?

A We got that contract in December, 1906, the Fairbanks contract, the first business we got. The Harvester Company up to that time had not used any that I know of. And, continuing the development, in 1907 we brought out what was known as our trifurcated pole machine, our model 'D.'

Q What kind is that? Tripolated?

A Trifurcated.

Q Trifurcated?

A Tri-polar. That showed some very excellent results as a generator.

669 Q What year was that when you got that type of machine out?

A According to my best memory it was the first part of 1907, the early part of the year 1907, or the very last part of 1906. I think it was the first part of 1907. That machine was offered to the Harvester Company as a rotary machine with a cast iron bracket, carrying its own bearing. I proposed driving it by a sprocket and chain. Mr. Charles Longenecker was in charge of the work then for the Harvester Company.

Q Speak up a little louder.

A Mr. Charles Longenecker was in charge of the work for the Harvester Company at that time.

Q Yes.

A He was not very communicative on his developments until later on. In the winter or early spring, I don't remember which, of 1907, according to my best knowledge and remembrance, we were informed that he had made an attachment which promised to be a very good machine, a very good equipment.

Q What kind of an attachment was it, to do what?

A This was an attachment for carrying the magneto and for operating it. This was an oscillating type of magneto and the first one, according to my best knowledge, where one of my magnetos had been so operated.

Q You mean that Mr. Longenecker devised a way to use

your rotary magneto, transformed your rotary magneto into an oscillating machine?

A Yes.

Q Did you learn that your rotary machine had been transformed by some one into an oscillatory machine?

A As I remember, we were informed that. However, shortly after that, I went to Milwaukee and saw it in operation and on that occasion Mr. Webster went with me.

Q Saw what?

A This tri-polar machine mounted on a bracket. It carried 670 ried springs and had mechanism for operating it as an oscillating magneto. And on that trip Mr. Maurice Kane and I am quite sure Mr. Cavanaugh were also there while this was shown to us in the laboratory of the Harvester Company at Milwaukee, the engine laboratory. That is substantially or identically, identical with the machine that is there on the floor. I think it is—

Q Which one is it?

A I think it is Plaintiff's Exhibit 11, this one right here.

Q This machine? (Indicating).

A That is the type.

Mr. Peaks: Better have the reporter get the number of the exhibit.

The Witness: 11, I think.

Q Where those machines such as is embodied here in Exhibit No. 11 subsequently sold by the Webster Electric Company to the International Harvester Company?

A Only a part of it. You said Webster Electric Company, I believe. It should be Webster Manufacturing Company.

Q Webster Manufacturing Company.

A We made the magneto with the rotor and shaft.

Q Now, let me ask you, just what you include within the term magneto.

A That is the straight bar permanent magnets with the pole pieces and the windings on them and the brass spider that holds it together as a unit, together with the screws on the shaft and the part that oscillates. It is a multi-part structure.

Q Those are all the parts which have to do with the generation of the electrical current?

A That is it.

Q Or the electrical spark?

A Yes.

Q Except the contacts?

A Yes. The rest of the apparatus was made by the 671 Harvester Company.

Q What part of the apparatus was that?

A The part that furnishes the bearing, the arm for holding the outer end of the springs and the bracket that supports that, connected with those parts, also the trip finger—also the trip finger and the connecting rod.

Q What next was done after that, Mr. Milton, in connection with this development?

A Well, the next thing on that development that was connected with this particular type of engine came quite a long time after that. This machine promised to be very satisfactory. We felt that it was a solution at the time, and we furnished quite a number of them. I say quite a number, we actually got some business in 1907 and in 1908 it about doubled.

However, there were a number of complaints that came in from different causes. These complaints consisted of the thing failing to give the spark which was due to a number of individual causes; one of them was the fact that the rotor would drag.

* * * * *

The rotor would drag on the stator or stationary member.

Q Now, just show the court how that happened, what you mean by the rotor and the stator and the dragging of the rotor on the stator.

A This member here that moves is the rotor. It would go against these faces of the stationary member. This one seems to be afflicted with the same trouble. It is dragging now. That was due primarily to inaccurate machine work. The bearing for the shaft would over-size and not concentric with the boss that supported the magneto. It also varied in size.

Another trouble was the fact that the outfit being so heavy would shift on the supporting boss, which was an integral part of the cylinder wall.

Q Mr. Milton, will you look at this drawing and tell 672 me whether that illustrates in a fairly graphic sort of way the boss to which you refer and on which this magneto was mounted.

A The member that is marked 'boss' is the member I have just referred to.

Q Does that look very much like it?

A That looks like quite a good representation.

Mr. Bulkley: I offer that in evidence, marked Defendants' Exhibit 16.

The Witness: Some of the other troubles were caused by the fact that the rods that are extended from the push finger to the spark plug would get out of adjustment, either by use or by the operator tampering with it.

Mr. Bulkley: Q Now, what rod is that you refer to?

A This connecting rod.

Q Between the finger, the push finger mentioned and the rotor shaft?

A The push finger, yes. Here is the push finger.

Q Yes.

A Later on, other troubles—another form of trouble came in, which was the most serious, although they were not as frequent as other complaints, which was a breaking of the cylinder walls by reason of this weight and the strains.

Q Now, perhaps, Mr. Milton, you can explain that in connection with this drawing, Exhibit 16, if you will.

A This wall of the cylinder, the outer wall was rather thin. Between it and the main cylinder wall was a space which was for carrying the water for cooling the engine. That would vary in thickness and in strength as all gray iron castings do.

Q Well, what broke the wall, the outer wall? Why did that wall break?

A It broke as a result of these extra strains that were put on it. This little boss primarily was arranged to carry a little roller, and only a light roller, over which was guided the pusher rod for working the make and break electrode of the sparking plug which is mounted at the back, at the closed end of the cylinder.

Q In that case what kind of ignition was it?

A That was battery ignition

Q That is, this boss was primarily intended to simply support a light rod passing, an anti-friction roller, over which this light rod passed?

A That is what I attempted to describe.

Q Now, how many of those cylinders have been properly put out, engines containing those cylinders with a boss on the cylinder, by the Independent Harvester Company?

A The International?

Q The International Harvester Company.

A I didn't quite get your question.

Q Do you know of the fact that there were engines built by the International Harvester Company, engines that had been built and put into service, quite a number of them, on which there was this boss on the cylinder?

A I visited the works a number of times and always saw the works crowded with engines, a great number of them were of that type. So I concluded they had a large production.

Q Now, what was there, if anything, in connection with the trouble in changing from battery ignition to magneto ignition?

A Well, this magneto, this attachment, was made largely as an influence of the Crossley alcohol engine that I saw up there at the Harvester Works, which came from England, with a magneto on it that was operated by springs. I understood that they took some of those parts for developing this attachment for operating the magneto, and that magneto had a longer travel than was necessary with this type of magneto. That is, the rotating member had a longer travel, and Mr. Longenecker incorporated in this design—

Mr. Williams: I object, your Honor, to all of this testimony by this witness as to what Longenecker did. I think it clearly should be confined—

Mr. Bulkley: Q Do you know whether he did it or not?

Mr. Williams: —to what this witness saw and knows of his own knowledge.

Mr. Bulkley: Q Mr. Milton, will you just, in view of this hailstorm of objections, confine yourself to what you know Mr. Longenecker did, what he told you he did, or what did you see he had done.

A That was what I was doing,—just as I was saying, that was what I saw he had done. I understood that was why he did it. When he told me, or just the details of it, I can't say now. That is a long time ago. I know he designed it, this vertical arm on it that I was about to describe.

Q Go ahead.

A Onto the open end of the cylinder he bolted a bracket onto which was a bearing for supporting the vertical arm. The lower end of this was connected directly to the cam that operated the ignition. The upper end of it was guided over a roller, which is present in this Defendant's or Plaintiff's Exhibit 11, so as to make contact with the push finger. Now,

that—by reason of that vertical lever it reversed the motion. That necessitated changing the cam shaft which was supported in bearings. It had two cams on it and a little eccentric on the end operating the gasoline pump. The exhaust cam, that had to operate as before. The ignition cam had to operate at a point which would be displaced by 180 degrees. This necessitated a new structure in the form of this cam shaft, so that in converting the engine from a battery ignition to magneto ignition, which I believe is your question, it is necessary to put in a new or different cam shaft 675 complete. This was a rather difficult job.

Q Now, Mr. Milton, when was it that you left for Europe with Mr. Webster and Mr. Anderson, the patent lawyer?

A Alexander.

Q Alexander, yes.

A It was about the second week in July of 1907.

Q When did you get back?

A I came back the last of September of the same year.

Q What did you do, generally speaking? Just generally tell us what you did over there, what you went over there for, and what you did do over there, just very generally.

A Mr. Webster went over there to organize an English company for making the magneto which was, which he was selling here in this country, under the name of the Milton.

Q Of the what?

A Of the Milton magneto.

Q Is that a low tension magneto?

A It is altogether a low tension magneto.

Q Yes.

A At that time Europe was very much ahead of America in the application of magnetos to stationary engines and to automobiles. Again at that time there was quite a question as to whether the prevailing ignition on automobiles was going to be low tension or high tension. A number of cars in this country were using the low tension. On that trip we took with us a Locomobile which was regularly, commercially furnished at that time as a low tension ignition engine. It had mounted on it, which installation I made myself at Bridgeport Connecticut, a magneto that was substantially a duplicate to this. However, it was—

Q Exhibit 11?

A Exhibit 11, the magneto part.

Q Yes.

A On a cast iron bracket, carrying the bearing and was driven by a sprocket and chain.

676 Q Yes.

A And this car was taken over to exhibit the splendid performance of this magneto. Another object of the trip was to get the patent art on magnetos in England, France and Germany.

Q And did you make quite a considerable investigation of foreign patents in those countries, of the patents in those countries?

A I accompanied Mr. Alexander quite regularly on that and we went through the available art at that time.

Q Now, I believe you have told us generally and sufficiently with reference to what occurred in 1908. Have you told us all the improvements that you made in this machine which was completed before you went to Europe?

A Well, this—before we went to Europe? I think I have completed that.

Q Yes.

A That was in 1907.

Q Yes.

A In 1908, as these complaints commenced to come in, we started to make corrections on it, and some time in 1908 the Harvester Company loaned us a small four-horse power, horizontal engine, which I used for experimental purposes.

Q What part of 1908 was that?

A I rather think that was in the summer of 1908. That is as near as I can place it now.

Q Did you see H. J. Podlesak at that time quite frequently, along in the summer and fall of 1908?

A Oh, at that time Mr. Podlesak was connected with the Erie Motor Company, which was at 12th and Rockwell.

Q Quite close to your factory?

A We were at 15th and Western Avenue, and he made quite frequent trips over there.

Q You were quite close together, were you?

A We were quite close together geographically.

677 Q Go ahead, Mr. Milton.

A I was very glad to consult with Mr. Podlesak on that because of his very wide experience on engines generally, and particularly the Harvester line.

Q Gas engines?

A He having designed the Horizontal line of the Harvester Company.

Q Did you know then that he had been at one time in charge of the experimental department of the International Harvester Company at Milwaukee?

A Mr. Podlesak, as I mentioned before, is the first man I met at Milwaukee in connection with this magneto 'C.' He was the first man to refuse what we had to offer.

Q Now, coming down to the late fall of 1908, what seemed to be the difficulty and trouble with this magneto which was being constructed, which was being sold by the International Harvester Company in connection with those engines, its gas engines?

A The principal, the most regularly occurring troubles we found at that time, we thought at that time, could be overcome by good workmanship, by refinements, but when the reports commenced to come in, about the damage done to the cylinder walls, we knew that some sort of a change was necessary, and that was why we got the small engine, and I proceeded to make a different mechanism for operating the magneto.

Q Would that danger to the cylinder walls be increased by increasing the speed of the engine, do you think?

A Oh, it would bring the shocks closer together and more of them. It is bound to have its effect.

Q Why didn't you take your magneto off from the boss and put it somewhere else at that time?

A Well, that was the—the Harvester Company, I had found, would not make any changes for our magneto which we had asked them to do, because the Fairbanks Company had made the changes, had had their manufacturers to 678 make changes for us. They had out, I understand, so many thousands of engines that the question of repairs was a very serious matter, so that is what was, as we found at that time, the only available place for mounting these magnetos.

Q Did you ever talk that over with Mr. H. J. Podlesak?

A A number of times.

Q About making the changes in the mounting of the magneto on the engine cylinder?

A I talked that over with him before he had left the Harvester Company, and I thought that we were limited just to the place where they had started to install them. That is, where Mr. Longenecker had started to install them.

And my next step was to decrease the weight of the magneto and decrease the weight of the mechanism and get rid

of the special cam shaft that was necessary for operating the magneto, and I made a magneto of that type, a magneto and bracket of that type.

Q Now, then, Mr. Milton, you have given me a number of blue prints here, which I think you can probably handle better than I can (handing blue prints to witness). Tell us which one of these several blue prints show the first change which you made to overcome these difficulties.

A I have here a print, serial No. M101, Webster Manufacturing Company, which is dated November 27, 1908, which is one of a—which shows the details of one of the forms of these magnetos, and which was the first form that I made for a spring operated type of magneto.

Q What did you say that date was, Mr. Milton?

A November 27th.

Q What year?

A 1908.

Q Where did you get this blue print? Where did you get all these blue prints you have here?

A I found them in my files, my patent folder files. I want to use that.

679 (Objection to use of blue print and discussion between counsel.)

The Court: Mr. Milton, is that a correct copy of the first change you made?

The Witness: This a correct blue print of the working drawings of the mechanism as we made the first one.

The Court: That means it is a true copy?

The Witness: It is a true copy.

Mr. Williams: Of what?

The Court: Of the working drawing, the first thing.

Mr. Peaks: It illustrates the progress.

The Witness: This is the working drawing, yes, sir.

Mr. Williams: Q Did you make the working drawings?

A No, this is made by Mr. William A. Kroepelin. This is his initials there.

Mr. Williams: Did you see him make it?

A I was there when we were making the change. I recognize his initials, and I remember of having worked with him on this. He figured in this particular type quite regularly.

The Court: It may be admitted.

(The document referred to was received in evidence and marked Defendants' Exhibit 17.)

Mr. Bulkley: Q Were you in charge at that time of this

magneto work which was being done by the Webster Manufacturing Company?

A I was.

Q As its chief engineer?

A I was in charge of the work that ordinarily comes under the, under the man who has that title.

Q Who is Mr. Kroeplin, that you have just spoken of?

A Mr. Kroeplin belonged to the regular, the main drafting room, was under the direct charge of a man by the name of Harry, of H. A. Smith, Harry Smith.

Q How did he happen to come over into your department?

680 A I went to his department, as a matter of fact, except when I wanted him to see some of the work we had done in the factory.

Q Did you have any other draftsmen under you or assisting you at this time?

A At this particular time?

Q Along in the year 1908?

A I had used a number of draftsmen in the main drafting room, and I had gotten to be more or less of a nuisance over there, because I was up-setting some of their regular work and I got, I afterwards got two men that were regularly under my charge on this magneto work.

Q Where did you get the authority to go over into the Webster Manufacturing Company and use their draftsmen? Who told you to go over there?

A Mr. Webster had it established around the factory there in the various departments that when I wanted work I was to get it, and I got it quite regularly.

Q What further did you want to say with reference to the character of the improvement which you had in mind in connection with this sketch number, or this blue print No. 17?

A This sketch, this drawing, this design, brought out the features, a number of new features, one significant one being the fact that a magneto operated with this mechanism did not require a special cam shaft or gear. We could get—this device could go on any of the engines out in the field that had been sold and in use without changing these parts, and the application was comparatively simple, compared with the installation of the Longenecker type of mechanism.

Q Are you referring now to the change from battery to magneto ignition?

A Yes, of course, they were all,—substantially all of them were battery ignition. Some of them were supplemented with little dynamos, but they were using batteries generally.

681 Q Why was it particularly desirable that that change could be made easily and readily?

A Because there was a big demand for an ignition, a dependable ignition apparatus that would get away from the batteries, because the battery gave a great deal of trouble.

Q I asked why was it particularly necessary that there should be a readiness of change from one to the other?

A Well, because it was such a big—was formerly, with the Longenecker type, was a very big job to change the engine from the battery to the Longenecker apparatus. Then again it became necessary to change from the magneto back to the battery. That was another big job.

Q In the field?

A In the field or any other place it was a big job and a particularly big job in the field.

The next feature of merit in this design was the fact that the weight of magneto itself was reduced. This brings in the magneto with the rounded pole pieces, that is, end members. And the bracket itself was very materially reduced in weight.

Q What is the member that you refer to as a bracket?

A That is all of this supporting mechanism.

Q For what? Supporting mechanism for what?

A Supporting the magneto and the mechanism for operating it, the springs and all. This design did away entirely with the cast iron supporting arms that we have here in this device, because the springs were carried at the outer end of the pole pieces. This brought the pusher rod which formerly connected with the movable electrode of the battery, the make and break mechanism, right in line with the finger which moved the rotor in a rotative motion. We have on that a little tripper device or dog so the thrust was direct. So that explains why it was unnecessary to change the cam.

Q Now, in making the patterns and castings and such machine work, was that all done under your direction?

A It was regularly done under my direction. I had
682 had it established—

Q By whom?

A I had it established that no new work could be taken on without my passing on it, because I was in a position to know what was of relative importance, and I paid very con-

siderable attention to the pattern work, the foundry work, and the machine work to be sure that the designs took care of all those features.

Q You say you had it established. How was that established?

A Well, through the cooperation of Mr. Webster, who had it understood that I was directly in charge, and these things had to be referred to me and they were referred to me quite regularly. At that time Mr. Munn was in charge of the magneto department. By magneto department I mean the department where we did most of our developing work and the assembling of most of our magnetos. The parts were made in different parts of the factory. The stampings were made in a department under a man by the name of Peterson and the machine parts were made in a department by a man by the name of McCarty, and the cast iron parts were made in the gray iron foundry, which was a very big one, which was under the direct charge of Mr. John Anderson. So I was in direct charge with all of these different departments.

Q What was the next step or improvement that you made, if you are through with this other?

A On this machine, this machine we installed on the four horse power engine that the Harvester Company had loaned to us, and it developed a feature that had not shown up in this other equipment, because these other equipments had not gone on the higher speed engines. They had gone on the six-horse power and above, as I remember. I don't remember them being on a smaller engine than the six. This small engine is quite a good deal higher speed and we found that it would start very nicely and get up to a certain speed and then commence to miss and fail to fire the charge, and there is quite a clashing of the parts; that is, the tripping mechanism parts. About that time Mr. Podlesak came along and 683 he looked the thing over. I showed it to him.

Q Showed what to him?

A Showed him just the four-horse power horizontal International Harvester engine, equipped with one of these devices with a single link mechanism mounted on the boss.

Q Which Podlesak?

A Harry J. Podlesak; and with his usual characteristic capacity of analysis he told me immediately what the trouble was. He said the moving parts were too heavy.

Q Just talk a little louder.

A He said the moving parts were too heavy. He told me that could be improved by reducing the weight of the rotor. He suggested my taking that out and drilling holes in the middle, and having the material filed out of it, which we did. We also reduced the weight of the nut which corresponds to the nut on the end of this machine and we set it up and the thing functioned beautifully.

Q Have you got a blue print which shows the change he made in the rotor?

A This blue print we have here shows the changes in the inductor, the rotor member, but it does not show the nut.

Q It shows the cutting of the centers out of the rotor?

A It shows the centers have been removed.

Q The stampings?

A Yes, sir.

Q But not the change in the nut?

A Yes, you can see it very plainly on the center part of the main figure. This is a rotor.

Q The figure in the upper left hand corner of the blue print?

A Yes.

Q Now, tell us what sort of a blue print that is, a blue print of what, speaking generally?

684 A This is a blue print of the details, of the parts that enter into the magneto, the bracket and mechanism for operating it, with the exception of the square rod that connected with the engine and the igniter rod which connected the magneto with the igniter. It is a working drawing giving all the necessary dimensions.

Q Do you know who made that drawing, the drawing from which that blue print was taken?

A According to my best remembrance it was Kroeplin that made that, because we worked together a great deal at that time.

Q Well, whoever made it, who gave the instructions to make it?

A They made it—whoever made it, made it under my instructions because I remember the various steps as we progressed in that design.

Q Now, take up your next blue print that you have there, I understand, showing the succeeding change.

A That device—

Q Was this one, this magneto which is here, of which this is a detail drawing ever sent to Milwaukee?

A I don't recall whether that was or not, that particular one. Because it was not long before I found that a change was necessary in that design.

Q Now, go on and tell us what change was necessary to be made.

A The change that was necessary was the fact that even though the machine, the magneto and its mechanism had been materially lightened, the magneto, in the event that it would get out of adjustment, would not function properly, because the pusher rod would—the errors—because the tripper mechanism on the pusher rod with the finger would not make proper contact, it being so far out that a slight movement of the boss would multiply the errors. So I developed what

I called a double length machine, carrying two of the 685 lengths instead of one that is shown on that. In fact, the change was in that it had a compensating feature so that the magneto on its bracket could go quite a little bit out of its former setting and still it would take care of itself on the adjustment and would not affect the tripper mechanism to which I have just referred.

The magneto itself developed a wave of current that was of sufficient duration to give me current over a period of degrees of the rotor's oscillation, which would take care of quite a bit of error between the pusher finger and the trip finger or the movable electrode through the connecting rod. So I thought that that was taken care of, that this new design would take care of the important points, the important point which was a machine which would go in the field and be installed on any of the standard horizontal engines, and which could be readily attached and that could be adjusted at the factory, and when so adjusted it would require very little adjustment out in the field and it did not require any change in cam shafts. I have blue prints showing the general installation of that, the timing of these parts in their various positions, which is Webster Manufacturing Company tracing entitled 'Diagram Showing Timing of Milton Magneto on I. H. C. Engine, Chicago, January 19, 1909.'

I also have a blue print of the details, which is a working drawing of the parts that enter into this magneto and the bracket and the mechanism for operating it. This magneto, this drawing is not dated.

Q Were those two drawings, or were the drawings from which these blue prints were taken, made under your directions, in accordance with your instructions?

A They were.

Q Do you know who made them, or either one of them?

A The paler one you have there showing the timing was made largely by the—

686 Q That is the one with the—it is not marked with a date.

A That is dated.

Q Is it?

A Yes.

Q Dated what?

A January 19, 1909.

Q Now, that one, what were you going to say about that?

A It is my remembrance that Mr. Kroeplin made the principal figures on this drawing.

Q Does that blue print correctly represent the correct copy of the original from which it was taken?

A Quite accurately, quite accurately.

Mr. Bulkley: I offer it in evidence and ask that it be marked Defendant's Exhibit 18.

(Objection—overruled.)

Q Was the original drawing from which this drawing that you have been talking about is taken, was that made under your direction and in accordance with your instructions?

A It was.

Q And who made that, if you remember?

A According to my best remembrance, all these details were made by Mr. Kroeplin.

Q Is that a correct copy of the original drawing?

A I would say it was substantially so, if not absolutely.

Mr. Bulkley: Offered and marked Defendant's Exhibit No. 19.

(Objection—overruled.)

Q Were machines made,—or magnetos made, of this two-link type?

A According to my remembrance we made one which was our first experimental machine and put it on the same little engine to which I referred, the horizontal International Harvester Company engine. And then another one with which we made exhaustive experiments on that; I believe it was made exactly in accordance with the details as shown
687 here; and that one was sent to the Harvester Company at Milwaukee, as we had every belief that it solved the problem, and we expected to get some business from it.

Q Who took that, if you remember, to the Milwaukee works of the International Harvester Company?

A Mr. E. J. Kane and William Kroeplin.

Q Did you tell them to take it up there?

A I did.

Q What became of this little engine that you had there experimenting with and which had been sent to you by the International Harvester Company?

A The Harvester Company had made a number of inquiries about it, whether it was the works of somebody that had it on their card and responsible for its return I don't remember; so when we had this design finished and thought that we would very shortly be getting business from them, I thought we were through with the engine, so the next time they inquired about it I was willing to let the engine go. The next thing I remember about it was that one of the employes of the McCormick Works, a man by the name of Merwin, George Merwin, had bought it, and he came over to the Webster Manufacturing Company plant in Chicago to look at it, and we had this attachment on it. I remember of his coming over to me, and I took him out to the room where it was located, which was the old engine left on the first floor of the old Webster Building, and in which—and which room was also a sheet metal shop. The engine was run for him and I showed him how it operated. I remember he seemed to be very pleased with it, and the engine was taken away with that equipment on it. It was my understanding—

Q Never mind about that. Did you have any talk with Mr. H. J. Podlesak before that engine was taken away with reference to the magneto and its development, and the manner of mounting on the cylinder?

A Yes, a number of times.

Q I mean, in connection with that particular engine?

688 A Yes, sir.

Q That was taken away, that which Mr. Merwin came to see you about?

A Yes.

Q And which you showed to him?

A Yes, sir.

Q What did you talk about?

A We talked about the mounting and the mechanism.

Q When you say the mounting, what do you mean?

A The bracket, and the mounting of it on the boss.

Q Of the cylinder?

A Yes. To see if— To consider the question as complying with all of the objections and requirements as set forth by the Harvester Company.

Q Did you talk over the insecurity of the connection of the magneto on the engine cylinder?

A We had had that under consideration, and I had hoped with the very material reduction—

Q What did you say to Mr. Podlesak and what did he say to you?

A Well, the substance of the conversation was that I believed that having the direct thrust right directly to the magneto push finger overcame the objection which I spoke of regarding the cam shaft, and the very material reduction in weight which would occur, the material reduction in weight,—

Q Of the magneto?

A —on the magneto and its bracket I thought would then be such that this boss would withstand the work that would be loaded or imposed upon it; and I said that it would help the thing if we could get the waterjacket on that cylinder wall reinforced, and I asked him—

Q Reinforced where?

689 A On the underneath side of it. I asked him if he thought the Harvester Company engineers would countenance the thickening of that wall.

Q At what point?

A At the junction of the boss with the—through the walls, would require thicker walls. He didn't think they would do it, at least he didn't think he would do it if he were still up there, because it meant not only a change in the wall but interfering with the water circulation, and further it meant, he thought, that it might affect the foundry proposition by producing a porous casting.

Well, it was at that time particularly,—whether at that particular time or not I don't remember, but he proposed that we would take the—that we take it up with the Harvester Company engineers and get them to extend a pad which was already on the cylinder wall to turn the magneto mechanism so that when they milled off that they also milled off a little next to it, and that would give us a flat surface on which we could bolt this mechanism close to the spark plug.

Q Of the mechanism?

A The double link.

Q The magento?

A Yes, the mechanism carrying the magneto.

Q Just look at this drawing and see—

A He said he would do that if he were still in charge up there; I remember that.

Q (Handing document to witness.) Let's see if you think that is what you understood him to say at that time.

A That is what I understood him to say at that time.

Q Just explain that.

A On this drawing, which is Defendant's Exhibit 16, we have a circular boss, right there at the plug opening, 690 which is shown in this next drawing, an extension of that.

Now, as the milling machine would go across this plug opening, he said it would also sweep off this extension that was proposed and that would give us a very secure, solid place on which to place the mechanism carrying the magneto.

Mr. Bulkley: The illustrative drawing submitted by the witness is offered in evidence as Defendants' Exhibit 20.

Q This suggestion was made, was it—

Mr. Williams: Are these drawings introduced as merely illustrative? They are not supposed to have been—

Mr. Bulkley: That is all.

Mr. Bulkley: Q When was this suggestion made with reference to the time that the Merwin engine was taken away?

A It was prior to its having been taken away.

Q Was any other suggestion made by either you or Mr. Podlesak prior to that time with reference to the way in which to fasten the magneto on the cylinder?

A It was just at that junction, and with the Merwin engine still before me, that the proposition of making a bracket carry the mechanism for operating the magneto and the magneto itself, with an extension on this bracket which would be the igniter plug, took form in my mind; that was before me when the first combined structure formulated itself.

Q Did you say anything about it at that time?

A According to my best memory, I talked to Mr. Podlesak about it before the engine was taken away; that was Mr. Harry Podlesak, I didn't know Mr. Emil Podlesak at that time.

Q As far as your present recollection permits you, would you say— What was it that you told him at that time with reference to this feature?

A That we would use the bolts that formerly held the igniter mechanism for holding this whole mechanism, which

was a double link mechanism with the igniter plug, all in one single thing.

Q What is the double link mechanism?

691 A That is as shown, a double link mechanism, for operating the magneto, and also for holding the magneto.

Q What do you include within that term when you say the double link mechanism?

A Well, that includes the bracket for supporting the magneto, the magneto mounted on it, the rotor, the rotor shaft, the trip finger, the links for guiding this little trip finger, and the little lever with the shaft in it for the advance and retard of the spark. That was all in this double link mechanism. The proposition was to secure that with these two bolts and at the same time extend that bracket and put into this bracket the igniter plug part.

Q What two bolts did you refer to?

A The two bolts that would normally go into the two holes as shown on this—

Q The two holes of what?

A There were two bolts for holding down the igniter mechanism which was very large and very strong and ample to carry this whole load that we are proposing to put on it.

Q The two bolts that hold what on what?

A Hold the igniter mechanism on the cylinder walls.

Q Yes?

A I thought that was understood.

Q Now, tell us as clearly as you can in connection with this model what you mean by the bolt that held the igniter on the cylinder, and what you call the two-link mechanism and how you suggested it, that one should be held on the other and on the engine cylinder.

Mr. Williams: Let me understand. Is he asked to tell what was said to Podlesak, or what was in his mind?

Mr. Bulkley: Well, we will put it what he had in his mind and then we will ask him what he told Podlesak.

Mr. Williams: I submit, your Honor, that what he 692 may have had in his mind is wholly incompetent.

The Court: It wouldn't amount to anything unless it were followed up, of course. Go on. That will be disclosed.

The Witness: The igniter mechanism—

Mr. Bulkley: Q Just tell what it consists of.

The Witness: (Continuing)—shown here in Exhibit 11-A

has two large holes in it, through which bolts passed, which in turn secured it to the cylinder wall. Now, the idea, as it was in my mind and as I discussed with Mr. Podlesak, was to take the bracket as shown in Defendants' Exhibit 19 and incorporate those two in one member.

Q Will you mark in some way the bracket so we can know what that is, to what you refer in that blue print as a bracket?

A Well, it is the second figure from the left hand corner.

The Court: At the bottom?

The Witness: At the bottom. I thought there was a name on it. This is a plan view directly over this figure.

Q What did you mean by 'incorporate these two,' what two?

A Make it into a single—

Q Besides the bracket, what else were you going to incorporate with the bracket?

A As I described, we were going to make a single casting that would carry substantially the same bracket which would carry the link mechanism, carry the magneto, and also the electrode which would extend into the cylinder.

Q What did you do about this suggested thing after that?

A Nothing was done immediately because I had every hopes that—

Mr. Williams: I object, your Honor, as to the 'because's'; that is not competent.

The Court: No. 'Nothing was done immediately'; stop there.

The Witness: Nothing was done immediately.

Mr. Bulkley: Q Why did you not immediately incorporate that structure physically and test it out?

693 The Witness: We had submitted to the Harvester Company a double link machine which we had been testing for quite a while on the block, and which had performed very splendidly and which I believed overcame all of the objectionable features, and I was in hopes and Mr. Webster seemed to share that hope with me, that we would get business from the Harvester Company at that time, on this particular design.

Q Well, what happened next? Your particular design, what one was that?

A This particular design, the double link machine. Well, about that time I remember a complaint came through from the Harvester Company. We got these complaints quite regularly; they sent us copies of the Engine Works com-

plaints. This complaint, I remember, made a very distinct impression on me, because it came from Mr. Couchman who was in charge of the Continental business of the Harvester Company and was located in Hamburg; and he stated in this complaint that an engine had broken the cylinder wall open while this engine was being transported by a horse and wagon, in Belgium. That made a very distinct impression on me. And the next thing I remember in connection with this work was that we got word, either written or oral, that we could not use this boss at all.

Q From whom did you get those instructions that the boss could not be used at all?

A I do not recall at this time just how that came. I remember that we were forbidden to use that boss.

Q For what purpose?

A For mounting the magneto.

Q Then what happened next?

A Then the next work— The next thing that happened, Mr. Webster took up with me in very seriousness the situation, and talked to me very seriously about it and seemed to be very much worried, we were about to lose the Harvester business on which we had been working—

694 Q Did he tell you all this?

A Yes, sir. We were then on the edge of losing all this business.

Q Did you talk over with him the fact that you could not use the boss any more?

A Yes, that was—I think the information came through Mr. Webster. According to my best remembrance, it came from Mr. Webster.

Q Just tell us all that occurred between you there at that time.

A When Mr. Webster talked to me so seriously on this subject, I told him I thought we could still do something because I had in mind at that time the other type that Mr. Podlesak and I talked over.

Q What one was that?

A That was the combining of the whole thing into one structure and putting it on the big, strong bolts back of the cylinder; that is, building a magneto with its supporting bracket, its mechanism, double link, and carrying the electrodes.

Q Building them how? Doing what with them?

A I said in one structure. I put that in the first part of my statement; I remember it.

Q And fastening it to the engine how?

A And fasten it into the engine with these big, strong bolts. And Mr. Webster said,—I don't remember his words exactly, but the instruction was to see how quickly we could to it, or if it could be done. So I started to work on that, and at that time Mr. Webster had given me Mr. Chiville who was doing my high tension development work, and I had Mr. E. J. Kane to do my low tension work; Mr. Kane had been with the company then several months, he having come there in the latter part of 1908, in the Fall of 1908, and had been working around there, and I found he could make drawings and he had made some drawings under my instructions, and I remember giving him that problem to do.

695 Q What did you say to him?

A To take this double link machine and extend that bracket so as to form the spark plug for holding the electrode, and put in the insulation, and making up the mechanism, as I remember it. That was my instruction and I remember him starting on it, and I remember his making a couple of sketches on it which were study sketches, without getting the thing down to a final meeting place. There was one series of operations—

Q What did Mr. Kane do?

A He started to work on these designs, and he was working at that time upon the fifth floor, and there was a little tool room that had been vacated—~~on~~ some months before that. He made the drawings, under my instruction, and which I watched, each stage, because I was very keenly interested in it because I was very hopeful of solving this problem. I always believed that the low tension machine would be the first one that we could get material business from.

Q Where did this interview occur with Mr. Kane, if you remember, when you told him what you wanted him to embody in the drawing?

A I cannot say definitely whether it was down stairs or up on the fifth floor, but I am inclined to think on the fifth floor because I spent most of my time up there.

Q About when was it, what time of the year?

A Well, since I have looked up my records and different letters and drawings in connection with it, and it takes form in my mind it was in the Spring of 1909.

Q With reference to the time when the engine, the Merwin engine, was taken away, about how long after that was it?

A The Merwin engine had been gone a number of weeks; I don't know how long, when we got the information that we could not use that boss.

Q To refresh your recollection, do you remember anything about a letter from Waterman, of March 15, 1909, which is in evidence here?

A I have heard that letter referred to a number of times, but I cannot positively—

Q Did you see that letter at that time?

A I don't recall whether I saw it or not, but I remember distinctly the substance of that letter; whether it came to me, the letter itself, or I got the information, I can't say, but I got the contents.

Q I show you Plaintiff's Exhibit 17; did you ever see that drawing before?

A I have no way of definitely identifying this drawing, but I remember very distinctly the idea as portrayed here as being one of the forms that were discussed in connection with this development work to which I referred.

Q What development work was that, Mr. Milton?

A The building of the mechanism, the bracket, the sparker, and sparker electrode, into a single structure.

Q And how mounted on the engine?

A Mounted on the engine with the two bolts which formerly held the spark electrode. These are the two bolts; the arm coming here, coming around here. One of the studies that preceded this came immediately around and made a box structure, which was very bad from a foundry standpoint; it was very difficult to machine. This one here has some of those objections. The magneto is shown here, and this whole thing is of a reduced size. This one had another objection to it, I remember it, this extension here, back under towards the closed end of the cylinder wall; on one type of the International Harvester Company horizontal engine was an exhaust pipe, according to my recollection; it was known as their famous Hopper Cooled engine; the exhaust pipe went up, I remember we made the change—

Q Who made that drawing, Mr. Milton?

697 A This is a tracing, made from—evidently from a drawing—

Mr. Williams: I object, your Honor, as to what may be evident; we can conclude as to that.

The Court: That is not the question. Who made it? The question is, who made it?

The Witness: Who made it?

The Court: Yes.

The Witness: Who made—

The Court: That particular paper?

The Witness: According to my best remembrance, Mr. Kane made this tracing.

Mr. Bulkley: Q How did he come to make it?

The Witness: Well, how he happened to come to make this particular tracing I don't recall, because our lay-out work had been done on other form of paper.

Q What do you refer to as the other lay-out work?

A In making drawings we generally use a— In fact, it was almost without exception, we used a grade of paper that would stand very considerable erasing, because we never knew when we would put down a line how long that was going to remain, because we were making changes and getting the ideas worked out so as to meet the various conditions of machine work in the foundry and assembly and installation, and so on.

Q Were such other lay-out drawings as that made?

A They were.

Q Do you know whether it was prior to this tracing, as you call it, or drawing or whatever it is, No. 17?

A I should say it was prior to this.

Q And who made some or all of those drawings, those lay-out drawings?

A Mr. Kane made them, under my instructions.

Q Did you ever see this drawing, Plaintiff's Exhibit No. 18?

A I remember the idea as shown here very plainly. I 698 have no direct way of identifying this particular drawing.

Q What idea do you refer to, Mr. Milton?

A The structure of the plug, and bracket and mechanism and all, in their relations to each other. This looks like the original study drawing, although it is not a complete one.

Mr. Williams: I object, your Honor, to these speculations as to what it looks like and so on. He says he can't identify it, can't remember it.

The Witness: I remember the idea very definitely; I remember the type of machine very definitely. The physical piece of paper itself I do not identify, and I have no means of doing that. This does not show the idea completely; it is

a study drawing,—in other words, it is not a working drawing.

Mr. Bulkley: Q Do you have any recollection as to who made that drawing?

The Witness: E. J. Kane, or substantially the same thing; I know he worked on that idea under my instruction at that time.

Q Mr. Milton, did you ever, while with the Webster Manufacturing Company, make any drawings yourself in connection with the development work with which you were engaged?

A I did some drawing; I did not do it regularly. I did a little of it. I regarded my time as being worth too much to make complete drawings.

The Court: You turned it over to a draftsman after having given him the idea?

The Witness: Yes, sir, your Honor; and frequently making sketches in guiding him.

Mr. Bulkley: Q What is this blue print which I show you now?

A This is a blue print of the working drawings of a structure of plug, bracket, working of the magneto and the mechanism for operating the magneto; it is a Webster Manufacturing Company drawing, a detail of Type B 2 open magneto for I. H. C. horizontal engine; such is the name on the lower left hand corner, and bears date of June 3, 1909.

699 Q Who made the drawing of which that was a blue print, do you know, Mr. Milton?

A I know—I want to modify that: I have every reason to believe that this is—that this print is from a tracing that was made by Mr. Kroeplin, and also that he made the drawing from which the tracing was made.

Q Who was Kroeplin working for at that time?

A He was in the Drafting Department under Mr. Hiram A. Smith, and Mr. Smith would turn him over to me for these special drafting jobs.

Q Did he work for you in connection with this combination of the plug and bracket?

A Always.

Q And magneto?

A When doing my work he always worked directly under my instruction.

Q I say, did he in connection with this—

A Yes, with this work.

Q And as to this particular tracing to which you have referred—

A This particular drawing, I remember our having worked on this together, but he was doing the actual drafting and as usual I simply superintended it.

Mr. Bulkley: That blue print is offered in evidence, marked Defendant's Exhibit 21.

Q Did you have anything to do with the embodiment of the structure shown in these drawings in actual mechanical form, and if so, what?

A I watched over that development very carefully, to make sure that the design not only accomplished the desired result from the standpoint of the operation of the engine but also to get a type which could be made in a foundry 700 without serious objection from the foundry, a type that could be machined readily and at low cost. I remember having discussed those points with the various men in charge of the work that that naturally fell on. In this particular design I remember distinctly talking to Mr. Munn regarding the machine points of it.

Q Going back a little, Mr. Milton, tell us if there is anything more with reference to talks you had with Mr. Kane about particularly that form of device which is shown in his tracing or drawing Exhibit No. 17. Did you tell anything about that?

(Objection—withdrawn.)

The Witness: I think I can answer to this drawing, or a duplicate of it or from sketches. When we got to this stage, which incidentally this design resembles very similarly the features as shown on the original single link machine; we came up with the pusher rod from the cam shaft direct on to the link; this link has an extension on it, however, which directly engages with the trip finger of the magneto which is also present in the other machine. And the next thing I remember in connection with this was to get rid of this arm that came around here at the back, because, as I said, there was one type of Harvester horizontal engine where that would interfere. And I remember, to get rid of that I proposed putting it down underneath, fastening up across, which is substantially what we have in our structure, as you see here in some of these models; I have reference to the one on that demonstrating stand.

Q Which one is that?

A The one under the blue print. The one that Mr. Carter has his hand on. We put that yoke underneath, taking it from the end towards the closed end of the cylinder and putting it down below.

Q Will you just tell us what was the particular kind of construction there shown and what criticism you made, if any, with reference to it as a foundry proposition?

A Well, I have referred to the foundry proposition, and this being a little bit awkward and which could be improved by changing the position of some of these parts, and in even this one it is better than our first one; that is, easier to make.

Q Did you talk with Mr. Kane?

A I did.

Q Anything about—

A This one.

Q —the form of construction which is shown here in plaintiff's Exhibit 18?

A I remember working with Mr. Kane on this design, as it progressed.

Q Did you have any criticism of that form, or type there, of embodiment there illustrated in Plaintiff's Exhibit 18, and if so, what, which you made known to Mr. Kane?

A Well, it is my remembrance that when we got to this stage of this study drawing, that it was turned over to Mr. Kroeplin who made the working drawings there so we could make one of them, because we could not have made one from this drawing.

Mr. Williams: You could or could not?

The Witness: Because we couldn't.

Mr. Williams: Could not?

The Witness: Could not. It is not a finished drawing, and there are no dimensions on it. Strictly a study drawing. That is, I want to modify that and say that in using the class of help that we were using at that time.

(The examination of the witness Milton was temporarily suspended.)

Mr. Bulkley: Mr. Merwin, will you take the witness stand, please?

702 GEORGE MILES MERWIN, called as a witness on behalf of defendants, having been first duly sworn, testified as follows:

Direct Examination by Mr. Bulkley.

Q What is your full name, Mr. Merwin?

A George Miles Merwin.

Q And where do you live?

A 3316 Harold Avenue, Berwyn.

Q What is your present occupation?

A Designing engineer, International Harvester.

Mr. Williams: Q For what?

A International Harvester Company.

Mr. Bulkley: Q What works are you connected with?

A McCormick.

Q Were you connected with the International Harvester Company in 1908 and 1910, or with the McCormick Works?

A I was connected with them in 1908, and from the first of October, 1910, on. Before that I was not.

Q Do you remember anything about going down to look at an engine, at the Webster Manufacturing works?

A Yes, sir.

Q Why did you go down to see that engine?

A Because I was leaving the employ of the Harvester Company, going to a farm in Oklahoma; and I went to see that engine, to buy it, and wanted to see whether it would be suitable for the purposes for which I wanted it.

Q Who told you that it was at the Webster Manufacturing Company?

A Mr. Cavanaugh, the Assistant Manager of our Experimental Department.

Q And did you see the engine?

A Yes, sir.

703 Q At the Webster Company's plant?

A Yes, sir.

Q Do you remember anything of what happened at the time you saw this engine?

A Why, I went, as I recall it, to the offices of the Webster Company, and they sent me out with a gentleman, and I looked at the engine, and he started it up for me, and operated it.

Q What was done with that engine?

A I bought it.

Q And then what was done with it?

A I loaded it,—it was delivered to the McCormick Works, and from there into a car which I had chartered, and loaded with household goods, and was shipped to Elgin, Oklahoma.

Q When was that?

A The last week of January, 1909.

Q You have a distinct present recollection of it at this time?

A Well, I was in Oklahoma, and bought a team of mules, on the first day of February, 1909, and drove that team of mules to Elgin, and there unloaded my car of goods, and took them out to the farm.

Q Was this engine in that car?

A Yes, sir.

Q And did you unload it?

A Yes, sir.

Q And take it over to the farm?

A Yes, sir.

Q At that time?

A Yes, sir.

Q What kind of an ignition did it have on that engine?

A It had a magneto.

Q Did you have any conversation with the one who showed you that engine, at the time, and operated it for you at the Webster Company, with reference to the magneto?

A I discovered that the engine was not operating by battery ignition; and I stated to him, 'If I take this engine of course this magneto will go with it.' He says, 'Yes, that will go with it.' And that is the way I got the engine. I also at the same time got all the batteries and parts for regular ignition, providing the magneto did not work always.

Q Were you told what make of magneto that was on the engine?

A I do not recall. It seems to me there was a name on the magneto, but I would not say positively.

Q Do you think you would be able to identify the person who took you out to this portion of the plant?

A I do not believe I could.

Mr. Bulkley: Mr. Milton, will you stand up for a moment?

(The witness John L. Milton stood up.)

Q Can you identify this gentleman standing up, as the one who took you about?

A Well,—

Mr. Peaks: Not who took him about, but who talked with him about the magneto?

Mr. Bulkley: Q Who took you to the magneto, and operated it for you.

A There is a little bit of a familiarity about his appearance, but I could not positively identify him. As I recall it, there were two men,—one that seemed to be a helper, and another one that knew what he was doing and showed me the engine, and started it up.

Q What was the size of this engine?

A Four-horse International horizontal engine.

Q Are there any other distinctive features of it which you could give, enabling us to identify it in any way, other than that, or any addition to what you have already given, as to its horse power?

705 A What do you mean? About the engine?

Q Yes, sir.

A Well, this particular one, the magneto, I could, I think, identify one similar to it. It was just an ordinary gasoline engine, water cooled; and had a large tank.

Mr. Peaks: If I may be pardoned for asking a question,—When you see the gentleman that stood up here, is there anything in his appearance that negatives to your mind the thought that he may have been the man you saw?

A No, nothing either way, either negative or positive; I might have seen him there, and I might not.

Cross-Examination by Mr. Williams.

Q You said, Mr. Merwin, that you could describe or identify the magneto equipment which there was on this four horse power engine that you bought. Will you describe that?

A Why, it was a square box affair, pivoted on a stud, and as the eccentric worked it operated against a lever that worked on some springs, to get the spark.

Q What do you mean when you say it was a square box affair?

A Well, the frame-work is square.

Q Like this machine that I show you, and which is marked Plaintiff's Exhibit No. 11?

A Let me look, just a second.

(Witness examines exhibit.)

A Yes, very similar to that. I recall it, because it had a set screw here (indicating); and after I had had it a while it bothered me a little bit, by not getting as hot a spark as I wanted, and I discovered that this set screw here was loose (indicating); and I set the magneto, by starting up the engine, and leaving the set screw loose, and holding this in different positions until I seemed to get the most power 706 from the engine (illustrating); then I stopped the engine, and tightened the set screw.

Q How did you determine whether you were getting the most power from the engine?

A By actual work,—speed of the engine.

Q Doing what kind of work?

A Grinding corn, and cobs, and shelling corn, and husking.

Q So you jiggled it around, until it seemed to husk the most corn, and then you tightened up the screw to hold it there; is that it?

A Well, I would not just express it that way. I gave it the proper adjustment.

Q Well, you did it by seeing how much work the engine would do, and then trying to hold it there?

A Well, I found this,—that my engine was not developing the same amount of power that it had been, and naturally I looked to find out what was the cause, and I discovered that this set screw was loose on the magneto, and I could not recall just exactly in which position,—which the position was, in which the magneto was sitting on the engine, and to determine that I started the engine, and then I held it just as solid as I could hold it (illustrating).

Q With your hands?

A With my hands, yes, sir. Of course it would give me a spring and rebound every time the magneto worked, but I was able to determine in which position the engine seemed to work to the greatest advantage; then I stopped the engine, and tightened up the screw, and started again, and, as I recall it, I possibly did that two or three times.

Q You mean two or three times, until you got it so that it seemed to be satisfactory?

A Yes, sir.

Q How long did you operate that engine?

A I sold it in September, 1910, at an auction sale.

707 Q You had it a little over a year, then?

A Well, I used it possibly,—practically two seasons; I had it nearly—I used it possibly a year and a half, I would say.

Q Now, the square box like part of the magneto to which you referred in first describing it, as I understand it, is this—

A Frame work.

Q Square frame work, here (indicating on device)?

A Yes, sir.

Q Including these permanent bar magnetos, and the coils?

A Well, I—

Q At least, it is that part that caused you to designate it as being—

A A square box.

Q A square box affair?

A Because I used the top of that to sight over the top of my cylinder, to see whether it would be level with the cylinder or not.

Q That is, in trying—

A Yes, sir.

Q —to maintain it in adjustment?

A Yes, sir.

Q So that it would give the power?

A Yes, sir.

Q And that, as I understand it, is the form of magneto which you saw on the engine there at the Webster Manufacturing Company's plant, when you went to look at it first?

A Yes, sir.

Q That is all. By the way, when you say that that was delivered to you, or at the McCormick Works,—as near as you can recall, in the last week in January?

A Yes, sir.

Q How long before that was it that you first saw the engine there, when you were considering buying it?

708 A Oh, possibly a week; something like that.

Mr. Williams: That is all.

Mr. Bulkley: Just a moment, Mr. Merwin. Where is the one you showed him (addressing Mr. Williams)?

Redirect Examination by Mr. Bulkley.

Q How much of this machine do you remember, which will enable you to identify it as the one which was on that engine (indicating device)?

A Well, this part in here (indicating) looks familiar, these springs here; and this part over here I would not say so positively about; but I recall that there were the two coil springs in here, or, coil springs, in there (indicating); and the center here.

Q The rotor?

A Yes, sir. I do not know what you call it.

Q The rotor, and—

A I know it was pivoted on a stud.

Q And are those all the features of this machine which you now at this late date remember as characteristic of the engine, or of the magneto on that engine?

A I cannot say positively. I remember there was a casting on there that was made of brass, that ordinarily would be made of malleable iron. And it seems to me this part right here is something of that (indicating), and yet I would not say positively.

Q And those are all the features that you can now remember, are they, as to—

A This (indicating)—well, I would not say positively, but it seems to me there was a spring, or a rod like that; but it has been so long that I would not want to say positively.

Mr. Williams: Let me get that in the record.

Q When you refer to the spring or 'rod like that,' you mean this five-sixteenths inch rod here (indicating)?

A Yes, sir.

709 Q About eight inches long?

A Yes, sir.

Q With the coiled helical spring around it?

A Yes, sir.

Mr. Bulkley: I think that is all.

Recross Examination by Mr. Williams.

Q The first part that you named as one that you could identify, in answer to Mr. Bulkley's question, was this piece that I turn here, was it not (indicating)? That is, you took hold of it, and said, 'This'?

A Yes, sir.

Q And—

A As I recall it, there was a four-point device there, that worked back and forth, with a jumping movement.

Q That is, this rotating part?

A Yes, sir.

Q About three and a half inches in diameter?

A Yes, sir.

Q Of laminated iron or steel, apparently?

A Yes. These parts here (indicating) do not seem so familiar to me, and yet seem as though they must have been there, too.

Q These (indicating)?

A As I recall,—this part in here (indicating).

Q When you say you are not so sure about these parts, you are referring to the coils of copper wire (indicating)?

A Yes, sir.

Q With tape wound around them?

A Yes, sir.

Q Or something like tape, wound around them?

A Yes.

Q Two of them, diametrically oppositely located?

710 A Yes, sir.

Q That is all.

A I do not know whether that engine is in use or not. I looked up my old sale bills the other night, and I know the man it was sold to.

Q You do?

A Yes, sir.

Q Who was it?

A (Producing a paper) T. M. McNear.

Q Of Elgin, Oklahoma?

A Lawton, Oklahoma.

Q Elgin?

A Lawton.

Q Lawton?

A Yes, sir. Probably, of course, there have been lots of changes, in ten years, in Oklahoma.

Mr. Williams: That is all with the witness. We are all through with Mr. Merwin.

Mr. Bulkley: Now, Mr. Milton, if you will resume.

JOHN LEWIS MILTON, resumed the stand, on behalf of the defendants, and further testified as follows:

Direct Examination Resumed by Mr. Bulkley.

Q Mr. Milton, will you go on, and tell us what was done after the completion of the drawing, the yellow drawing, Plaintiff's Exhibit 18? Do you know what one I refer to?

A Yes, I recall. I know; why, we made working drawings for patterns; then after the patterns were started, or immediately following that drawing, we proceeded to make the drawings for the machine work; and while the drawings for the patterns were being made, and the castings procured, we started on the other parts, as we would ordinarily do in a case of that kind, where we were working under speed.

Mr. Williams: Q What is that?

A I say, as we would ordinarily do in a case of that kind, when we were working for speed, expediting the work.

Mr. Bulkley: Q Well, what character of drawings did you make? How were they made, and how were they given to the workmen? In what form?

A According to my best memory, we followed our regular form.

Mr. Williams: Q What is that?

A We followed our regular routine on that, which was to make drawings on regular drawing paper, and shellac them or put a clear varnish on them, to protect them while the mechanics were handling them. And then these drawings go to the shop, and after the pieces were finished, and any changes noted on them, then we would make our tracings from those drawings.

Q Are you telling now what you would do?

A That is what we did as a regular thing; and I do not recall having changed it, for this particular development.

Q How were those drawings prepared? Were they with all of the details on one sheet, or how?

A Each part was detailed on a separate sheet.

Q And then what was finally done?

A And then, as I said, those drawings were assembled, after the corrections were made on them, and traced, on the one sheet.

Q Now, why was that plan pursued, of making separate detailed sheets?

A To expedite the production of the samples, the models.

Q Now, let me digress for a moment from this line that you have been pursuing, and ask you something here about your high tension work; and in the first place, can you
712 tell us generally what the difference is, distinctively, between a high tension magneto and a low tension magneto?

A Well, as ordinarily—

Q As you were working on them at that time?

A As ordinarily understood, a high tension or a jump spark magneto delivers electric current, at a very high voltage, sufficient to jump gaps in the spark plug—in a cylinder where there is compression, which increases the resistance very materially; whereas, with a low tension machine, it generates a current of low pressure, which is delivered to contact points in the cylinder, one of the electrodes being connected to the outside, and it is moved by a part of the engine, which separates those points,—and the arc is drawn on them.

The Court: Q Can you give about the number of volts, on a low tension, just at the spark?

A That would range anywhere from about four to eighteen volts.

The Court: And on the high tension?

A Measured somewhere between fifteen and thirty thousand.

The Court: Yes. Well, is there more current, in the low tension machine?

A Very much greater current. The current would run as high as an ampere and a half to two amperes.

The Court: And in the other?

A And in the jump spark it would run from about twenty milliamperes to as high as three hundred milliamperes; I have seen measures made; that is about a third of an ampere.

The Court: That is, about three hundred ten-thousandths?

A Three hundred thousandths.

The Court: Three hundred thousandths, of course.

A Yes.

Mr. Bulkley: Q Just give us briefly what the nature of your work was prior to 1909, in connection with the high
713 tension magneto, for the Webster Manufacturing Company.

A Just prior to Mr. Webster's and Mr. Alexander's and my departure for Europe, I remember Mr. Alexander was out here in Chicago on patent matters, and the subject was being discussed about the trip, and while he was here I got my first real good jump spark from an inductor type of magneto, and while he was making up his—weighing the subject, I told him that if he would come up and look at this thing it might help him to make his decision. That was about May or June of 1907. So that is how I fixed the date, as when we first started,—I actually had a jump spark machine in operation, and it looked very promising, although the apparatus was very, very crude. We followed that through, by slow stages, as none of us knew very much about jump spark magnetos; in fact, we did not know a great deal about any of them at that time; it was in its infancy. And on our return from Europe we proceeded with our experiments, and tests, and before we had a magneto completed, before we got one completed and distributed,—even, equipped with a distributor—

Mr. Williams: Q What was that?

A Before we even got one equipped with a distributor, we were sending out those samples, in response to Mr. Webster's messages to get the jump spark magneto on the market. I was very much opposed to that line of procedure, because I was more interested in the low tension magneto, and maintained continually that it would be the first one to give us regular business. In 1908, the summer of 1908, we had a magneto running on a Buick that belonged to Mr. Brinkley, a jump spark magneto. We had another one running on a Stoddard-Dayton, that belonged to the Webster Manufacturing Company. And in the summer or early fall of the same year I bought a Cadillac, to put that on; the engine was sent over to the Webster Manufacturing Company, in Chicago here, and I equipped it with a high tension magneto of my own make; after the work was finished, this 714 engine went back to the Cadillac plant. It was one of the first engines that the Cadillac Company had made, on their famous Model 30, which appeared in 1909; and in the early winter,—January, I think it was, of 1909, that car was sent here to Chicago by freight, and we took it out to the Webster Company, and did considerable experimenting with it, put a number of different models on it.

Mr. Williams: I do not hear you, Mr. Milton.

A We put a number of different models on it. In 1909, continually—in 1909, we submitted a number of models to the Cadillac Company, or, the Cadillac Motor Company, of Detroit. We also submitted a model to the Reo Company. These models at first went into the laboratories. The Reo Company did not manifest very much interest in it. The Cadillac did. A number of tests were made there by a man by the name of D. V. Webster, in the laboratory. Later on they got to a point where they were putting them on cars.

Q Where what?

A Putting them on their automobiles, and making road tests; and the development was coming along quite satisfactorily; and it progressed until July 14 of that year, when to my great surprise they gave us the order for their season's requirement, which was estimated at ten thousand for 1910. I say to my great surprise; I did not know that we had the order until I heard Mr. Webster say, in the presence of Mr. Leland, 'Well, how to you want these magnetos sent to you?' Mr. H. M. Leland.

Mr. Bulkley: Q Mr. Milton, whom did you have as a draftsman, assisting you, in connection with this particular line of work, high tension work?

A Why, I used a number of the draftsmen in the main drafting room, but Chiville was given to me to take my orders direct, without having to go through Mr. Smith, who was still in charge of the drafting room.

715 Q Did he work with you?

A He worked with me on—

Q Considerably, on this line?

A He worked with me almost—

Q And if so, between what periods?

A He worked with me, according to my best memory, from the fall or late summer of 1908, until August of 1909. Of course Mr. Chiville did not only do the drafting, but he did some of the machine work, some of the assembling, and made installations; as he had time to spare, he did other drafting work for me.

Q I show you a letter which is marked for identification as Exhibit 4, Defendants'. Do you remember that letter?

(Letter shown witness.)

A I remember this letter.

Q Whose initials are those at the bottom?

A Mr. T. K. Webster.

Q And you received this through the ordinary course of mail, did you?

A I did.

Mr. Bulkley: That is offered in evidence, marked for identification as Defendants' Exhibit 4,—to be marked in evidence as Defendants' Exhibit 4. I will read that, if the court please, into the record. (Reading:)

'April 16, 1909.

Union League Club, Chicago.

'Dear Milton:

Mr. Lyon'—Is that?

The Witness: Tyson.

Mr. Bulkley: (Reading:)

'Mr. Tyson telephoned that the International would send engine over to our place. I wish you would arrange to take account of stock of material on hand May 1st; also, complete list and prices of tools in your igniter department. 716 Please write me at N. Y., 88 Reade Street, how the small sized magneto comes on.'

The Witness: Yes.

Mr. Bulkley: Q 'Carries on'?

The Witness: 'Comes on.'

Mr. Bulkley: (Reading.)

'Comes on,—if you get a good spark.'

Initialed, 'T. K. W.'

Q What was referred to there as the small sized magneto, in this letter? And to what did the comment about the good spark relate?

Mr. Williams: That letter, as I understand it—I do not think the record shows—is a letter from Mr. Webster to Mr. Milton?

Mr. Bulkley: Yes, I believe so.

Mr. Williams: I object to the question, as incompetent, and calling for a conclusion, merely.

Mr. Bulkley: Q If you know, Mr. Milton,

Mr. Williams: I make the same objection.

The Court: Overruled.

Mr. Bulkley: Read the question, please.

(Pending question read.)

A Well, we had been working to reduce the size of the magneto that went on the stationary engines, and that went by a number of stages, as I recall, when we were working, making special efforts to reduce the weight.

Mr. Williams: Q What is that?

A When we were making special efforts to reduce the weight of the magneto, and we developed a still smaller one, which according to my best memory was substantially the same as afterward went into production, and as shown here in some of these exhibits, like on this demonstrating stand;

and according to my best memory, it was through his 717 anxiousness on this point that he wrote me, to find out if this small machine was going to be a success.

Q Just step here.

(Witness leaves witness stand.)

Q Is that the type of machine to which you referred (indicating Exhibit)?

A That is—

Q Plaintiff's Exhibit 47.

A Or 15.

Q Or 15. Now, during this period from when this development began, to the time that you made the suggestion to Mr. Kane, that is, in making drawings in accordance with your instructions, and along through to the completion of the work, were you out of town very much during that period, at that period?

A At that particular period, or, from a period starting in advance of that, the end of December, on 'till I went to Europe, which was in August, I spent very little time away from Chicago, and I make that statement unreservedly, because I was married in December, the previous year, and my wife was a stranger here in town, she having come from the same town I did, Louisville, Kentucky, and objected very seriously to being left here alone; and Mr. Webster had given me Mr. Chiville to help me on the high tension work, not only to expedite the matter, but to help me, to enable me, to spend more time here in Chicago; and Mr. Kane was delegated to me similarly, on low tension work.

Q Now, during this period just stated to you, from the time this development work began on this particular type of magneto, in which the magneto is mounted upon the plug, up to the conclusion of that development, to a point where it was produced as a marketable article, how much time did you devote to the high tension work, relatively speaking?

A Well, it is a bit difficult for me to say it, after the lapse of—in round figures,—ten years.

718 Q I only ask approximately. You do not need to—

A. But I know that the low tension machine was always of more interest to me, because, as I stated before, I thought that that was the machine that was going to give us our first business, and I thought I knew a great deal more about it than I did the jump spark machine.

Q Having reference, Mr. Milton, to this Exhibit 4, you told us that the small sized magneto there was one which was similar to,—Exhibits 15, or 47?

A I think those are the correct numbers.

Q Have you examined these, to see what they embody?

A The magneto structure, do you mean? The magneto proper?

Q Well, the machine, the machine itself. Have you looked at those?

A Yes, I have looked at them.

Q To see what they are. Now, what was this engine ordered for, which is referred to in this letter?

Mr. Williams: I object to that, as incompetent.

The Court: He may answer.

A As this unitary structure commenced to take form, and hold out considerable promise, I wanted to test it out, as soon as we had it convenient, and I asked Mr. Webster if he could not get for me an engine; and that letter simply shows that he had done as I had asked him to. It was a Harvester engine, a horizontal engine.

Q Now, after you had completed the work, or after the general study work, and designing, had been completed, then what next did you do after you had your various parts made, and your entire tracing completed?

A Well, there was a stage ahead of that. The detail drawings were made, and put in the shop, and the parts made, and the machine was assembled, and then it was—

Q That is, before the complete tracing?

719 A Oh, yes.

Q Embodying all the—views?

A Yes.

Q The machine was made?

A Yes; the machine was tried before the tracing was made. Then we put it on the engine, and tested it, ran it.

Q Now, point out among these various exhibits here one of those completed engines, as it was completed, before you had the tracing in its entirety made and tried out on the engine?

A Well, that is difficult to do right now, because I do not believe there are any models there that represent that machine as it was first made; there are some that would carry the idea exactly; there is the one you have your hand on (indicating), and the model, Exhibit 15, this side of it,—they carry the idea generally, almost the complete idea.

Q What were the differences, if any; could you tell, in a general way?

A Why, the difference, one difference particularly, the first one we made did not have the automatic cut-out feature on it, which these have. That was applied to the first engine of which we have photographs. It was a separate device, and later it was incorporated into this design, as is shown here. I would say that was the principal difference. Another big difference,—I will not say “big” difference,—it was an important difference,—was in the yoke; the first yoke was a forging, made up of four pieces.

Q Now, keep your voice up on this, so that we can get it.

A There was a main body, that had two pins driven into it, and riveted over. That gives three pieces. And the fourth piece was a little steel insert, and, these, we used a malleable iron casting, with the steel insert riveted into it, which brought us to two pieces. That was just another evidence of the development.

720 Q And, with those differences, it was substantially the same as—

A Substantially the same.

Q As Plaintiff's Exhibits 15, or 47?

A Substantially the same.

Q About when was it that this machine was completed, from the separate drawings which were distributed among the workmen?

A Well, I cannot say definitely, but it seems to be in my memory that it took something like two weeks to do it.

Q From and after what time?

A From and after the time we made the study drawing, as shown in this exhibit, Exhibit 18.

Q The yellow drawing.

A Yes.

Q Plaintiff's Exhibit 18?

A Yes, sir.

Q What more, if anything, did you have to do with ref-

erence to the manufacture of this new type of magneto construction, after the completion of the first specimen?

A Why, it was presented to the important prospective customers we had, the Harvester Company. And I discussed that with Mr. Webster, as the best method of doing it, and right away it was agreed that we would ask them to come over; so Mr. Cavanaugh and Mr. Maurice Kane, and Mr. Stewart, who was in charge of the patent department at that time, all came over.

Q Came over where?

A To the Webster Manufacturing Company's plant; and we took them up to the fifth floor, and ran the engine for them, with this device on it; and everybody was very much pleased; considerable enthusiasm was exhibited.

Mr. Williams: Q What is that?

A Considerable enthusiasm was exhibited, at that time.

Mr. Bulkley: Q Now, Mr. Milton, will you detail, as 721 fully as you remember it, just what you had to do with the making of the patterns, from the drawings, and to do with the foundry work, as it went through, and the machine work, as it was continued on, in connection with this first machine?

A This first machine was experimental, and to get that through the other departments, with least possible time, I found that it was always necessary to appear in person, because Mr. Webster had arranged with all of his departments to do what I wanted immediately, at the expense of the other things that were coming through; and I would talk to a man by the name of Cummings, in charge of the pattern department, and watch it through the various stages; and I discussed the design with the foundry manager.

Q Who was that?

A Mr. John Anderson. And also discussed with Munn the method of machining that. I remember particularly that when this irregularly shaped casting came out, it was a little bit of a puzzle as to just how we could machine that experimentally, and also as a regular manufacturing proposition; and I remember his showing me how he would get it to one side of the machine and how he would turn it around on the lathe, and machine the other side, and how he would hold the parallel faces in line, and how he would hold the concentric holes together, and he would measure it, over in a chuck—to get the off-

center holes, which were the ones in which the insulated electrode and the moveable electrode were put. I remember those details very distinctly. Also, it was a new problem to us; we had never made a make and break mechanism in our experiments before; that was the first one.

Q Do you remember any particular man connected with the machine work other than Munn, with whom you had to do, or dealt with, in this development?

722 A Why, on the experimental work, I discussed that with Munn. I do not recall having talked to anybody else, for the experimental end of it, that is, bringing through this first model.

Q Well, subsequently, I mean, in connection with the machine work, what did you have to do?

A You have reference to the production end, I suppose?

Q I presume so.

A The mechanics?

Q Just look at this letter, which is marked Exhibit 5, Defendants' Exhibits 5 for Identification (handing same to witness). Do you know that signature, and to whom is that addressed?

A That is Mr. T. K. Webster's signature, and is addressed to me.

Q Did you receive that letter?

A I received it.

Q Do you remember having received it?

A I do.

Q And, generally, of its contents?

A Yes, sir.

Q About when was that? About May, of 1909?

A The date is quite in accordance with my memory of its coming directly after the Harvester matter.

Mr. Bulkley: We offer it in evidence, as Defendants' Exhibit 5, formerly identified as Exhibit 5.

The Court: Admitted.

Mr. Bulkley: (Reading): "Hotel Seville, New York.

"Dear John:

Had a very interesting interview with Mr. Hill, of 723 'Fairbanks.' Also interviewed the President. Mr.

Wells, Mr. Hubbard, and two of their foreign representatives. If the attachment of the No. magneto proves out all right on Field-B, then will put it on all their engines.

They will have Bates & Edmonds send one of their engines to put the spring type on. The other style,—although the fly wheel was so hard to start—”

The Witness: “Back of the fly wheel”

Mr. Bulkley: Oh, yes. (Reading):

“The other style, back of fly wheel, was so hard to start, that they have not been selling any. We must follow up both of them as soon as possible.

Yours truly,

T. K. WEBSTER,
May, 1909”

Mr. Bulkley: Q Now, here is another letter, which was marked for identification as Defendants’ Exhibit 6 (handing same to witness). Do you remember that letter, and whose signature it is, and when you got it, and how you got it?

A I remember the letter; I remember the contents of it. I initialed this myself at that time.

Q By whom was it written, and to whom was it sent?

A It was written by me to Mr. T. K. Webster, at New York City. The stenographer was Miss Laura Kitchell.

Mr. Bulkley: Offered in evidence, as Defendants’ Exhibit 6. (Reading): The lettering appears at the head, “J. L. M./L. K.”

“May 21, 1909.

“Mr. T. K. Webster,
New York City.

Dear Mr. Webster:

724 We are today in receipt of a letter from Bates & Edmonds Motor Company, advising us that Fairbanks & Company had asked them to send us an engine for attaching our oscillating type of magneto. We are writing them to send it at once, as we can give it immediate attention.

“I am writing you today to urge your getting the Fairbanks Co. to take the 150 magnetos that we have made especially for their small vertical engine, for the reason that as soon as they see this oscillating type of megneto, they will not consider this old type, whereas now they very probably would, especially if we quote them a low price. I would recommend going as low as \$5 or \$6. This would enable them to use the battery for starting, and then switch over to the magneto. You probably know that this magneto has proven thoroughly satisfactory to them, with the single exception of the starting. It is as permanent and durable as a

magneto can be made, with the present knowledge of it, so it will not be offering them an inferior article.

Soliciting your careful consideration of the above, I am,
Yours very truly,

J. L. M."

Q What type of magneto was it referred to in this letter, as the batch of 150 magnetos?

A It was the one that was built back of the fly-wheel, known as our Type C, or Type C-1, and shown in our catalogue at that time.

Q I ask you to look at another letter, Mr. Milton, purporting to be dated the fifth of October, 1909. (Handing same to witness) Who wrote that letter, and to whom was it written and mailed?

725 A This was May 10, 1909.

Q Who wrote that letter? Did you?

A I wrote the letter.

Q And to whom?

A To Mr. T. K. Webster, New York City, care Webster Manufacturing Company.

Q And when?

A May 10, 1909.

Mr. Bulkley: Offered in evidence; it was marked for identification as Defendants' Exhibit 14; offered in evidence as Defendants' Exhibit 14. The lettering at the head, "J. L. M." a

(Reading):

"J. L. M.

5/10/1909

Mr. T. K. Webster,

President, Webster Manufacturing Company,
New York City.

"Dear Mr. Webster:

I have your two letters of the 8th, and in reply thereto desire to state that we have ordered dies for the smaller type of low tension magneto, which is to be used on the Harvester work. Just prior to taking our inventory we had to concentrate our attention on getting the equipment ready for Mr. Chiville. The inventory was a serious interruption. And since then we have been very busy attending to the Harvester Company's demands. They have gotten intensely impatient, telephoning several times a day, as well as telegraphing us from Milwaukee. This has all been supplemented by many letters; so you can readily see why we have

concentrated our attention to this live business. We expect to make shipment today that will satisfy their immediate demands, which will allow us to go back to the high tension magneto tomorrow, I have done nothing further on the completion of the small high tension coil. I am pleased to note from your various communications that the magneto is working satisfactorily.

Yours very truly,

JNO. L. MILTON."

726 Q Now, what was referred to in this letter as the smaller type magneto, for jump spark work?

A That is substantially the same magneto as shown in Complainant's Exhibit No. 15.

Mr. Williams: Q What was that?

A I think—

Q As shown what?

A Complainant's Exhibit No. 15.

Mr. Bulkley: Just look at this letter, and see what that refers to, if you please.

A It says very definitely here the low—the small type of low tension magneto which is to be used on the Harvester work.

Q Then you were mistaken, were you, when you referred to the Exhibit 15 as the—

A No.

Q Is that a jump spark type?

A Harvester work. It is low tension work.

Q Yes, but it is not a jump spark, is it?

A Not a jump spark.

Q This 15 is not a jump spark?

A No, it is not a jump spark.

Q Yes.

A Low tension.

Mr. Bulkley: I think I brought about the confusion myself. Now, to make it perfectly clear,— I think that your confusion was the result of my confusion. The ordering of dies was for the low tension magneto, as the letter says, and what type of magneto was that? That was Exhibit 15; like Exhibit 15?

The Witness: Like Exhibit 15. 15 may have been made from those same dies.

Q Now, then, let me ask you what the smaller type mag-

neto for jump spark work referred to; what type of magneto was that?

727 A Down below here?

Q Yes. Just the same sentence.

A That is the jump spark magneto that Mr. Webster was working with down at New York; he had, as I recall it, the Maxwell-Briscoe people interested in that.

Mr. Williams: What was that, Mr. Milton?

The Witness: As I remember, he had the Maxwell-Briscoe Co. interested in that magneto, and he was working down there at New York, which accounts for his presence at New York, my having addressed him there; he had Mr. Chiville with him. They were testing it out on an automobile. I say here: "We expect to make shipment to-day"—No, that is wrong. "We expect to"—No.

Mr. Bulkley: Q Perhaps I can call your attention to it without making further mistakes. You mentioned here the fact that the Harvester Company was intensely impatient and telephoning several times a day from Milwaukee; what were they telephoning to you impatiently about?

A For deliveries of the low tension magneto.

Q Of what type?

A A low tension type.

Q Well, what particular kind of magneto?

A Oscillator. Oscillator type.

Q Which of the many kinds that you had produced were they impatient to get?

A Substantially the same as shown here in this Exhibit 15 of the Defendants.

Mr. Williams: Shown in Exhibit 15 of what?

The Witness: Of the Defendants.

Mr. Peaks: Of the Plaintiff.

The Witness: Plaintiff's. I beg pardon.

Mr. Bulkley: Q What did you refer to in this letter as "live business"?

728 The Witness: I had in mind the business that would be worth while and actually develop into something, something tangible.

Mr. Williams: What is the last, Mr. Milton?

The Witness: Something tangible.

Q Had you ever sold any high tension magnetos while you were with the Webster Company?

A Not up to this time.

Q And you had sold low tension magnetos, had you not?

A We had.

Q What was this small high tension coil to which you refer in this letter, and in connection with which you say you had done nothing further on it for some time?

A We were experimenting with a regular jump spark on a Rumkorff type of transformer coil which was used in connection with the jump spark magneto, and we had made different sizes of that and this was a smaller type.

Q Just look at this letter also, Mr. Milton, and state whether you ever received it and from whom, the initials here at the bottom of it, when it was you received it and how you received it.

A I received this letter in due course of time, shortly after the date that was given here, May 22, 1909, and from Mr. Webster while he was in New York.

Mr. Bulkley: This letter heretofore marked as Defendant's Exhibit for Identification 7 is offered as Defendant's Exhibit 7. (Reading.)

(Said document, so offered and received in evidence, was marked Defendant's Exhibit 7, and the same is in the words and figures following to wit:)

729

(DEFENDANT'S EXHIBIT 7.)

"Webster Manufacturing Company

"New York, U. S. A. May 22, 1909.

"Dictated by TKW W

"Mr. John Milton,

"Webster Manufacturing Company,

"Chicago, Ill.

"Dear Milton:

"Chiville arrived on time and I find that what happened was where he attached the rods of the magneto. This connection gave way and when they put it on again attached it to the wrong place to attach it and they could not get sufficient swing to start it from the seat. This we are remedying to-day.

"I also received the foreign patents in the hands of Chiville. I am glad to know that the Harvester magneto has been expressed.

"I have just seen Mr. Knight and he tells me that they are intending to put the magneto on a 45 H. P. car. Chiville has expressed himself as being afraid that our magneto will not

serve a 45 H. P. car. I had always supposed that our magneto was plenty big enough for any car. Do you think Chicago is right. Answer me by Twentieth Century.

“T K W,
“President.”

Q What type or kind of a magneto was referred to by the words “Harvester Magneto which has been expressed”?

A That was calling for one of the same type as Plaintiff’s Exhibit 15; as I remember, it carried the bracket with it, as he wanted to show it to some people there at New York.

Mr. Williams: What was that, Mr. Milton?

The Witness: As I remember it, it carried a bracket 730 with it, as he wanted to show it to some people there at New York.

Mr. Bulkley: Q Look at this letter, Mr. Milton. These are copies. Where did you get that letter, how did you get it, and from whom did you get it?

The Witness: This is a letter addressed to me, or sent to me by Mr. T. K. Webster, and I received it in London, England, at 22 Torrington Square. The letter is dated October 25, 1909. I received it, as I remember, when I got back from the conference; it was there waiting for me.

Mr. Bulkley: The letter referred to is offered, marked Defendant’s Exhibit 22. I will read it. “Webster Manufacturing Company, Dictated by T. K. W.—L. K. Chicago, October 25—

Mr. Williams: Let me object to that letter first, the form of it for want of sufficient identification. That has not been—That is a new one that has not been submitted to any one else, is it not?

Mr. Bulkley: I do not know whether it has been submitted to you or not. I do not think this one has. No. The witness says that it was received by him in due course of mail delivery.

Q You identify this as the signature of Mr. Webster, do you?

A I remember it very distinctly.

Q You identify this signature as that of Mr. Webster?

A I do.

(The said document, so offered and received in evidence, was marked Defendant’s Exhibit 22, and was read as follows, to wit:)

"Chicago, October 25, 1909.

"Mr. John L. Milton,
"American Express Co.,
" #6 Haymarket
"London, W. C.

"Dear Sir:

"I went out to the Harvester Co. to-day and find that 731 they have been having very poor success indeed in the foreign trade with the Milton magneto of the square type attached by the boss to the engine.

"We received a short time ago a letter containing twelve counts against this machine. They are greatly discouraged about it. In fact, they were ready to abandon it, had not Mr. Cavanagh sent them a cable last week, advising them that the new machine had overcome all the objections they spoke about in the old one. I think if you wish to retain the foreign trade for the Milton magneto it would be well for you to go over to Hamburg and see Mr. H. V. Couchman.

"We are sending him by express today a model of the low tension machine as it is now adopted by the Harvester Co. They have been delayed in making shipments of engines with the magnetos, though I believe they now have two or three on the ocean and more are going through. The delay has not been our fault but the fault of the factory at Milwaukee in not getting out the attachments promptly.

"Yours very truly,

" T. K. WEBSTER

Q What is that, some initials, below the name of T. K. Webster?

A Abbreviation for "President."

Mr. Williams: What was that?

The Witness: Abbreviation for "President."

Mr. Bulkley: Q When did you go to Europe during 1909?

The Witness: In August, about the third week.

Q How did you happen to go to Europe? For what purpose primarily?

A There were a number of purposes.

Q State very briefly.

A I had been working very hard on these different developments of the low tension magneto and high tension magneto and shortly after the Cadillac gave us that order of July

14—

732 Mr. Williams: What is that, Mr. Milton?

The Witness: Shortly after the Cadillac gave us an order on July 14, 1909, of magnetos for the next year's re-

quirements. Mr. Webster called a meeting here in Chicago, of Mr. Bert Stephens, his son T. K. Webster, Jr., Mr. A. P. Perkins, Vice-President of the company, and Mr. Henry Epley who was Superintendent of the Malleable Iron, a subsidiary of the Webster Manufacturing Company located at Tiffin, Ohio. And Mr. T. K. Webster, Jr., was also an officer of this company.

This meeting was held at the Union League Club, and for the purpose of discussing how this business of the Cadillac was to be handled. There was considerable difference of opinion; I was in favor of holding it here in Chicago where we had a good labor market, excellent material market, and the nucleus of a factory already in operation, together with other departments which could give valuable assistance.

I neglected to state that Mr. H. Waterbury, who was president of the Tiffin Malleable Iron, was also present at this meeting. Mr. Waterbury was anxious to get the business in Tiffin where his company was located; Mr. Webster wanted it there, and Mr. Perkins and Mr. Stevens, who was a stockholder in the Webster Company, was opposed to it; and I remember Mr. Stevens offering to bet Mr. Webster a suit of clothes that he would not make the deliveries in the specified time if it went to the Tiffin factory.

At this meeting Mr. Webster told me that I had done some good work, that he knew I was tired and worn out, and to take a rest, and he was going to put a couple of fresh horses in my place; I rememebr that phrase distinctly. The "fresh horses" were his son and Mr. Epley.

So I planned to take this rest in Europe, and also to look after my foreign patents which had been very seriously
733 neglected and on which I could get no agreement from Mr. Webster. We had talked it over a great many times,—that is, Mr. Webster, Mr. Walter E. Teagle and Mr. Alexander and myself, all of us having been previously interested in the foreign development of the—When the other trip to Europe was made.

Mr. Bulkley: Q How long were you away in Europe?

A From about the third week in August until Christmas time. I was back in this country for Christmas, and I was in Tiffin, Ohio, on Christmas Eve.

Q Did you become associated again with Mr. T. K. Webster upon your return?

A The next winter, or, rather, the same winter, over in January or February of the next year, Mr. Webster's sales

manager, a man by the name of Major B. Hawkshurst, was very keenly interested in some development work that I had been doing on another form of ignition apparatus which was known as the flaming arc system. He came down to Louisville where I was doing my work, to observe the results, and he reported very favorably to Mr. Webster and urged that Mr. Webster avail himself of the opportunity to get this device and put it on the market. It resulted in my going to Tiffin and spending a number of months working with the Webster Company, at my own expense,—that is, as far as my personal expenses went, the Webster Company simply—the Webster Electric Company simply furnishing material and some labor, and the space in which to develop this device.

Q Before you left for Europe did Mr. Webster know that you were going to Europe?

A Mr. Webster knew it.

Q Did he make any objection to your going to Europe?

A He did not, that I can recall.

Q Did he say anything to you about leaving them in the lurch at a critical time?

A No he rather—My impression is that he was very
734 glad to get away so that the "fresh horses" could carry it on.

Q Incidentally I want to call your attention to the instance when Mr. Webster says he got his first jolt in connection with the test of the Cadillac car with the high tension magneto on it, when he said that it was all prepared for the engineers to take a run across Michigan and test that magneto, and he was surprised to find that you would not go with him; do you remember anything about that?

A I do.

Q Why didn't you go? Why couldn't you go at that time?

A Well, the representation that that was prepared for the engineer to make a test was hardly an actual one. The engineer had been working on the car for at least two months,—the real engineers of the company; Mr. Fred Hawse, Mr. Johnson and Mr. E. E. Sweet; and they knew what the car was doing and what the magneto was doing. And this Mr. McKechney that Mr. Webster wanted to take over to the summer place, Holland, Michigan, was rated as an electrician, he was not rated as an engineer, he had the department that made the installation of the equipment on the cars. And I was not feeling equal to that trip and I did not wish to go for that reason. I do remember of going with Mr. Webster to

the Cadillac plant, because, as I understood it, Mr. H. M. Leland would not allow the car to go out unless I was present, thinking—That they had a very strict ruling, I forget what they called it at that time, against “joy rides.” He wanted some results to be gotten from the use of the car.

Q Mr. Milton, Mr. Kane has testified as to having shown you this drawing Exhibit 18—Plaintiff’s Exhibit 17, I should say, the one on tracing paper, and he has testified to some remarks which he said you made when shown that drawing.

(Interruption.)

The Court: I understood you went to Europe in August, 1909, and returned in December, 1909.

The Witness: Exactly; before Christmas.

Mr. Bulkley: Q Well, let me pass that until we can get a copy of the testimony. Oh, let me ask you this while we have that for a moment. When you went to Europe, what did you do before leaving this country in connection with the plan which you had in view in Europe to develop the sale of your magneto? What preparation did you make, what did you do? Have any dies made?

The Witness: Well, that was another phase of it. The manufacture of this magneto in Europe was proposed and agreed to by Mr. Walter C. Teagle and he had me to order punches, dies and necessary machinery.

Mr. Williams: I object to that, as to what Teagle may have agreed. I do not see that this witness—

Mr. Bulkley: Q Don’t state anything about that. Tell me what you did do before you went away, in connection with the matter in hand.

The Witness: Prepared to manufacture the magneto in Europe.

Q What did you do in this country?

A Had tools made.

Q And took those to Europe. What magneto was that?

A It was what was known in the trade as the Milton magneto.

Q Which one of the many magnetos we have had—

A Our Exhibit 15.

Q The improved, the last you mean?

A Yes.

Q Then what did you do after you got abroad in connection with that?

A I made arrangements for the manufacture of the magneto with Elliott Brothers, at their Century Works.

736 Q What were they?

A. They were instrument builders of—there in London.

Q What did they do?

A Started to manufacture.

Q Did they manufacture any considerable number of them?

A I simply do not know how many; I do not remember of ever having seen a report of that. Mr. Teagle looked after them.

Q Mr. Milton, what did you do about patents over there?

A Started at once to have a patent prepared, by Marks & Clerk.

Q On what?

A On this particular device, the Milton magneto with the attachment, and also had other patent—matters pertaining to patents, which needed my attention.

Q Why didn't you take out—Did you file any application in the United States before in Europe?

A I had not at that time.

Q Why not?

A Because Mr. Webster and I had not agreed on the patent policy, and we simply could never come to conclusions when those questions came up, and I knew that it was my plan to file the thing,—to file the application as soon as I got to Europe and that my rights would be preserved under the rulings of the Convention, so that I could apply for it at any time within a year after that.

The Court: What was the date of your English application?

The Witness: October 1909; I think it was the 29th of the month.

Mr. Bulkley: I offer in evidence in this case a copy of the Milton English Patent, 24848 A. D. 1909, to be marked Defendant's Exhibit 23;

Mr. Bulkley: Q When you got back what did you do about the patents in the United States on this unitary bracket arrangement.

The Witness: I watched the time and took it up with Mr. Webster, and also with—

737 Q When you took it up with Mr. Webster what did you say to him and what did he say to you about it?

A I told him I thought that a patent protection ought to be procured in this country.

Q On what? What did you tell him? Tell all you said about it.

A "Is this particular device the same thing?"

Q What particular device?

A The Milton magneto and the unitary bracket and spark plug; the one subject which you are discussing.

Q What did he say?

A I don't remember of his ever agreeing to take it out, simply to start the work on it; he would simply delay the matter from time to time and think it over, and then I remember of writing to Mr. Williams to—on the subject. I also wrote to Mr. Webster on the subject.

Q What Mr. Williams was that? What Mr. Williams was that that you refer to?

A Mr. Lynn A. Williams.

Q Attorney for the Webster Company?

A Attorney for the Webster Electric Company at that time.

Mr. Buckley: I wonder if we couldn't at recess arrange to put all this bundle in without going all over it?

The Court: Are you ready now to do that?

Mr. Bulkley: Yes. With this witness? Wes.

Q Are you familiar with Mr. Lynn A. Williams' signature? Do you know it when you see it?

A Yes.

Q I will call you attention to that letter; when did you receive that? Do you know the signature to that letter?

A It is dated October 13, 1910, and I don't remember its having come through anything irregularly. And this is Mr. Lynn A. Williams' signature, as I have seen it many times.

Mr. Bulkley: I offer it in evidence as Defendant's Exhibit 24. (Reading.)

738 (Said document, so offered and received in evidence, was marked Defendant's Exhibit 24, and is in the words and figures following, to wit:)

"Brown & Williams

"October 13, 1910.

"Mr. John L. Milton,
c/o Webster Electric Co.,
Tiffin, Ohio.

Dear Sir:

"You will appreciate that I must be a little careful about taking up application work for you. I have, therefore, shown

your letter to Mr. Linthieum. He says that there can be no objection to my taking up the work for you if the Webster Company is not interested. I have talked also with Mr. Webster over the telephone and have told him that I should like to file the application for you if he does not wish to do anything with it. He promised to come in today and to come to a final decision one way or the other. If the Webster Company does not care to do anything with the matter, I shall be glad to take it up for you and will proceed with the preparation of the papers at once. We can have them ready in the course of four or five days and that will give us time to make any corrections or revisions that may be required before they are executed and filed.

"I will write you to-night telling you whether or not Mr. Webster has been here and, if he comes, the result of our interview.

"Yours very truly,

"LYNN A. WILLIAMS."

Q To what application work did this letter refer?

A That was my own serial number, "Case #10," which is the tenth of the series.

739 Q I don't believe that number appears in this letter; I may be mistaken, but I don't think it is in that one.

A I have it written there. (Indicating.)

Q Oh, I beg your pardon.

A And it was on that apparatus that we were selling to the Harvester Company, known as the Milton magneto, the unitary plug and bracket structure.

Q Look at this letter that was marked; when did you get that letter? How did you get it and from whom?

A Shortly after its date. It was from Mr. Lynn A. Williams, addressed to me care of Webster Electric Company, Tiffin, Ohio. I received it.

Q It is marked in pencil in that mark, Mr. Milton?

A Yes.

Q It has the pencil mark, "Case #10." (Reading letter:)

(Said document, so offered and received in evidence, was marked Defendant's Exhibit 25, and is in the words and figures following, to wit:)

“Offices of Brown & Williams

“Chicago, October 13, 1910.

“Mr. John L. Milton,

“c/o Webster Electric Co.,

“Tiffin, Ohio.

“Dear Sir:

“Mr. T. K. Webster has been in talking with me about the United States application covering the subject-matter of your British application number 24838/’09. He will not be able to come to a definite conclusion until to-morrow when he wishes me to look over one of the low tension machines which the company is now making.

“I told him that you appreciated the importance of having the United States application filed at once and that you were therefore insistent that a decision should be reached. I told him that you were right in appreciating the importance of prompt action. The result of our conference was that we shall proceed at once with the preparation of the application papers and before they are finished Mr. Webster will have come to a decision. If he does not wish to file the application, it will be available to you for that purpose and can be filed easily within the time limit.

“Yours very truly,

“LYNN A. WILLIAMS.”

The Court: What is the date of it?

Mr. Bulkley: October 13, 1910.

I offer in evidence a copy of the Milton domestic patent, United States patent, which was filed on October 28, 1910, and the number of which is 1,096,048.

Q You are the “John L. Milton” referred to in that patent?

The Witness: I am.

Mr. Bulkley: (Indicating) That is offered in evidence as Defendant’s Exhibit 25.

Mr. Williams: Are you offering that letter of October 13 the second one?

Mr. Bulkley: Yes. Better put that in first, if you please; letter of Williams to Milton of October 13, 1910, offered as Defendant’s Exhibit 25, and the patent as Defendant’s Exhibit 26.

And I also offer in evidence two other patents of Milton, respectively numbers 1,053,107 and 1,051,373, issued on Jan-

uary 21, 1913, and February 11, 1913, to be marked Defendant's Exhibits 27 and 28.

Mr. Bulkley: Q. Who paid the filing fees on this application on the unitary structure type of magneto which was filed in October of 1910?

The Witness: I bought a Post Office Money Order in Tiffin, Ohio, and sent it on myself with the application.

Q Did you receive a bill from Mr. Williams for his services in connection with the preparation of this application?

A I did.

Q Did you pay that bill?

A I did not.

741 Q Who paid the final Government fee on this application, do you know, Mr. Milton, when the patent issued?

A I do not know. I fancy it was the Webster Electric Co.

Q Look at this letter; from whom did you receive it, and when and how?

A It is another letter from Mr. Lynn A. Williams, addressed to me at Tiffin, Ohio, under date of October 1, 1910. According to my remembrance, I received it about that time.

Mr. Bulkley: It has the pencil marks, "Case #10" at the head of it. (Reading:)

"Offices of Brown & Williams

"October 1, 1910.

"Mr. John L. Milton,

"C/o Webster Electric Co.,

"Tiffin, Ohio.

"Dear Sir:

"Replying to your letter of September 29th, I have to say that we called the matter of the application covering the subject matter of the British Patent No. 24838/'09 to Mr. Webster and the Webster Electric Co. but have had no reply.

"I do not believe they would wish me to decide the matter on my own initiative.

"I have, therefore, written them again, enclosing a copy of this letter.

"Yours very truly,

"LYNN A. WILLIAMS."

Mr. Bulkley: I offer in evidence Defendant's Exhibit 29.

Q Look at this letter and state from whom you got it and when and how?

742 A Letter from the firm of Brown & Williams, dated September 10, 1910, to me at the Webster Electric Company, Tiffin, Ohio. I received it shortly after that.

Mr. Bulkley: I offer it in evidence, marked as defendant's Exhibit 30.

(Said letter was then received in evidence, marked defendant's Exhibit 30, and was read as follows:)

Pencil note: "Case No. 10.

September 10, 1910.

Mr. John L. Milton,
Care of Webster Electric Co.,
Tiffin, Ohio.

Dear Sir:—

We beg to acknowledge receipt of your favor of September 8th, enclosing papers in the matter of British application 24838 of 1909. We are waiting to ascertain whether or not the corresponding U. S. application is to be filed. We shall let you know promptly of the decision in this matter.

Yours very truly,

BROWN & WILLIAMS."

And in pend there is this appended:

"Tiffin, September 29, 1910.

Mr. Lynn A. Williams,
Monadnock Block,
Chicago, Ill.

My dear Mr. Williams:

I have not received further reply to your letter of the 10th inst. The time in which to get this application of British No. 24838 of '09 has almost expired. I am obliged to request you to advise me by return mail your decision, as well
743 as that of the Webster Manufacturing Company on this matter.

Please let me have the confirmation as above."

(Initialed) Jxo. L. M.

Q Here is a letter under date of January 5, 1911. How did you get that, from whom and when?

A From Brown & Williams, addressed to me at Tiffin, Ohio, care of Webster Electric Company and bears date of January 5, 1911. I received that letter shortly thereafter.

Q And this other letter which I show you?

A That is another letter from Brown & Williams dated February 7, 1911, addressed to me care of the Webster Electric Company, Tiffin, Ohio. I received it.

Mr. Bulkley: The letter of January 5th, 1911, is offered

in evidence as defendant's Exhibit 31, and the letter of February 7, 1911, is offered in evidence as defendant's Exhibit 32.

* * * * *

Q Have you in your possession any letter written by you to Mr. Webster personally asking him whether he had decided to take up this American application or not, the filing of the United States application on this British patent?

A I don't have it here, but I think I can locate it.

Q Will you try to do that? That will close the presentation of this correspondence. Perhaps I better postpone that and go on with something else.

You testified in an interference case at one time in connection with this same matter.

A I did.

Q Do you remember about when that was?

A I believe it was in January of 1917.

Q Now, tell us under what circumstances you came to 744 testify in that case.

A Previous to my giving the actual testimony Mr. Williams had written me—Mr. Lynn A. Williams had written me about doing this. I was very, very busy at the time and simply could not spare the time to get up any information on it or give the time to the taking of the testimony. Time drifted along until one day I was in his office on some other business and he asked me if I could not—when I could do it.

Q When you could do what?

A When I could give my time for taking of this testimony. I told him I simply could not see my way clear to giving any time in the immediate future, because we were just in the midst of moving our plant—having moved our plant from Detroit to Cleveland and getting established, and my time was needed in my regular work to the exclusion of everything else. He asked me if he could not take it that day. I had an engagement at 6 o'clock, leaving town that night, and he asked me if he could not take it right then, that it would not take very long, and I agreed to give it to him. I happened to be in his office. I hadn't any record and none of my letters.

Q Had you at any time previous to that, within a recent period, examined any documents or letters or anything to refresh your recollection as to the circumstances connected with this matter?

A The interference was declared about the last of August

or the first of September, and when I got my notice from the patent office—

Q What year?

A 1906.

The Court: 1916?

The Witness: 1916, I beg your pardon. And about the first of October Mr. Lynn Williams came to Detroit to
745 see me. He wrote me a note and said he was in town and asked me to call him up at the Hotel Statler, I think it was, which I did. If I remember correctly, that same evening we had dinner together at my residence and we started to look over these records.

Q What records?

A Over the records of this interference, and we went to the basement—

Q What did Mr. Williams tell you he wanted to do?

A To hunt up any supporting data that I would have on this, as to when I conceived this invention, and whom I talked to, and anything else that would help to substantiate the fact that I was the inventor of it. The thing was very old at that time; the patents were issued and the manufacturing proceeding. I had dismissed the thing as a closed issue. However, I told him that I had some of my files and I could in a short time put my hand on files that should carry the information pertaining to this particular case, which was case No. 10. We went down in the basement and opened a trunk and fished out the file of Case No. 10 and he inspected it. We went through another file of miscellaneous drawings, as I recall it, and it is my remembrance that I gave him a blue print at that time.

Q Do you know what this blue print was about?

A On this unitary structure of the magneto. I do not recall whether it was detail or assembly. I told him at the time that I had some other blue prints and data at Louisville, Kentucky and I would send for them, which I did, and they came through in due course and in looking through them I was not impressed that there was anything there that would set the date of this particular development, although I found the facts as they developed showed that there was—

Q Never mind what was shown. Just state the facts.

A The thing went along until, as I recall it, some months after that, when Mr. See came over—that might be in
746 January, I don't know, but it was quite some months

afterwards. I have the accurate record on that if you wish it.

Q State it generally.

A Mr. See went through my files and took a number of exhibits, photographs, and pamphlets, and I don't recall whether there were any drawings went with it or not, but he sent me a list of them the next day, and I have his receipt.

Mr. Williams: You have what?

A I have his receipt, a letter in which he states what he had taken, and from that time until the time I gave the testimony there was nothing done that I can recall.

Q How long a time were you occupied in giving your testimony in that case?

A According to my memory it was about an hour or an hour and a quarter.

Q Did you subsequently find any other papers, or make any other investigation or search for papers?

A The matter dropped entirely from my mind at that time—

Q That is, of giving your testimony?

A Of giving my testimony. They sent me a copy to sign, which I signed and forwarded, and until I got a letter from—No, I don't remember of anything occurring after that until in the testimony of this last year, last November or the first of December, this last year, I first learned that the interference had been decided in favor of Kane.

Q What did you do then? How did you learn that?

A I was at Racine, Wisconsin on some other work, and met you, Mr. C. C. Bulkley, and was introduced to you by Mr. Emil Podlesak, and we had dinner together and you informed me of the proceeding, and asked me what I knew about them, and I was very much interested to know the way the thing had developed.

Q Did you subsequently make an effort to find any other or further papers in connection with this matter?

747 A I agreed—I promised you that I would look through my drawings again and you—

Mr. Williams: That you would do what?

A Look through my drawings again, which I did, and I was not impressed that I had anything of any information—that would contribute any definite information on the subject until—well, the matter was dropped then for the time being and along in December, later, Mr. Bulkley came to Cleveland

on an appointment which was arranged by Mr. A. H. Bates of Cleveland, and met him in the evening, and spent a couple of hours with him—which I did. At that time we made a review of the case in the presence of Mr. Bates, and during this review he read the testimony as it was given from the records.

Q Whose testimony do you remember was read?

A The testimony of Mr.— It wasn't the complete testimony; just extracts from Mr. T. K. Webster's, Mr. E. J. Kane's, Mr. Chiville and Mr. Abbott Munn.

Q Had you read or heard read that testimony before?

A Never heard of it before.

Q Proceed.

Mr Williams: What was that last?

The Witness: I never heard of it before.

Mr Bulkley: Q What did you do after that interview with me and Mr. Bates?

A I did quite a little bit of thinking. I felt that a great injustice had been done me. I felt that my record in the patent office had been besmirched and proceeded to hunt up my correspondence.

Mr Williams: What was the last?

Mr Bulkley: Q What did you do after that interview with me and Mr. Bates?

Mr Williams: I object to that last answer as to his inner feelings.

748 The Court: He said he did a lot of thinking, that is all right.

Mr Williams: I don't know how it is competent as evidence.

The Court: He is pointing out what he did and why he did it.

The Witness: I thought that I might be able to set right what appeared to be wrong to me in that testimony.

The Court: In your own testimony?

A In that testimony as it was read to me by Mr. Bulkley.

The Court: The testimony of the others.

A Yes, I remember that I had written—that I had a considerable lot of correspondence with Mr. Teagle, and Mr. Alexander. Mr. Alexander was the former patent attorney for the Webster Manufacturing Company. I looked up my files on that and I came across some other files and I thought they might have something in them. And the more I went

through the files the more records I found that would refresh my memory and also what I thought would tend to right some of these statements that I thought were wrong, in the other letters that have been offered here today, so I told Mr. Bates what I had found. At that time I didn't want to come to the case here and be a witness. I wanted to give my testimony in Cleveland.

Mr Williams: I object to what he wanted to do. If he will confine himself to facts.

The Court: Yes.

Mr Williams: If he will tell all that he said and did, that will be better.

The Witness: This is an unusual proceeding for me and I don't know what the limits are. If I overstep them I hope to be corrected.

The Court: I will correct you, if necessary.

Mr Bulkley: Q Then what did you do?

A In what respect?

Q After you had discovered this evidence, this correspondence.

749 A I brought them here to Chicago and exhibited them in Mr. Lynn Williams' office to you and Mr. Williams and some other attorneys jointly. That was the end of the case, which was January 13, 1919.

Q Now, will you tell us under what circumstances Joe Kane came into the employ of the Webster Manufacturing Company? What did you have to do with that, if anything?

A In 1908, September, at the Springfield Fair—the Illinois State Fair held at Springfield, Illinois, I attended the exhibit of the International Harvester Company which I mentioned previously, and during the time I was there Mr. Maurice Kane told me that he would like for his son to get some ignition experience and wanted to know if we could give him a position there at the plant. I was very glad to have him present that subject to me in that way, for that—

Mr Williams: What is that?

The Witness: I was very glad to have him present the subject to me for a number of reasons. I told him to send his son out and he came out and he started to work shortly after that. That was September—I think it was the next month—I had met him before when he came out to get a magneto, which he put on his boat. We gave him a magneto.

Q Did Mr. Webster make any complaint to you about the

slow way you were getting out this new low tension magneto of the unitary bracket type?

A He always manifested considerable impatience on this experimental work.

Q I mean this particular work.

A At this particular talk I was additionally impressed with it, because it was the first time— The only talk that I can remember where he offered to subordinate the jump spark or automobile ignition for the low tension or stationary engine ignition, and his proposition was to take Mr. Chiville off the jump spark work and put him on this low tension work.

750 Q Did you do that?

A I did.

Q What did Mr. Chiville do about it?

A Mr. Chiville was working, doing his drafting in the main drafting room on the third floor of the old building of the Webster Manufacturing Company, and he took the ideas that I gave him of consolidating the double link motion machine with the bracket supporting magneto, with the spark electrodes in the casting that it was formed in—

Q Do you mean the spark plug?

A The spark plug carrying the whole thing on the two bolts.

Q What two bolts?

A The only two bolts that are available at that time for that; the bolts that formerly held—

Q The cylinder bolts; the engine bolts?

A They are both on the side of the cylinder wall. Mr. Chiville carried out the instructions very faithfully, as I recall it. He took that identical apparatus, consolidated it with the plug, and turned it in a vertical position, and it gave me substantially what we would have if we took the double link motion and put it on the plug. He worked it with the bell crank lever, which was the first connection with the push rod. That formed one of the links. This was a very unsightly affair and it was not possible to use it because it would interfere or strike the hopper on the hopper cooling type of the International Harvester engine. While he was doing that Mr. Kane was working on the other type, which I finally used.

Q The double link type?

A No, we gradually eliminated the parts—

Q Did he start with the double link type?

A We started with the double link type, with that general arrangement, and as we worked on the thing and got it developed in the process of development we dropped one 751 part and then another as we simplified it, which is the ordinary process of these experimental developments.

Q Then what did you finally reach? What type of adaptation of the magneto did you reach?

A We finally reached the unitary plug with magneto supporting bracket as an integral unit.

Q Single or double link?

A We finally eliminated the links, and had the push come over the roller direct, instead of being moved by the link. The roller did the guiding.

Q Now will ask you what I started to ask you before, with reference to this Exhibit 18, in connection with what Mr. Kane said you said when he came and showed you this drawing, Exhibit 18. Wait just a moment.

Mr. Williams: We object to this question as the witness testified that he did not recall that Kane ever showed him that drawing.

The Court: I think he did.

Mr. Williams: He said he saw it on white paper.

The Witness: I certainly stated that this drawing here Mr. Kane and I worked over together.

The Court: I think he did. You may answer.

Mr. Bulkley: I haven't quite completed it.

Q Mr. Kane says that he showed you that drawing and talked with you about it; that he showed it to you right after he showed it to Mr. Webster; that you looked it over and said: "I don't think that is going to work; you have got the igniter finger pointing upward, with the direct push of the magneto; and that is going to place it out of time, so that it won't trip at the right time. Did you ever say that to him or that in substance?

A I don't recall ever having said that in substance, in the first place, and in the second place, if I had said it, it 752 would have been very illogical.

Mr. Bulkley: Just wait a minute. Just answer that question.

Q You say you don't recollect having said that?

A. I do not.

Q Do you know whether you did say that to him or not?

A I would say that I didn't say it.

Q Will you please point out on that drawing you find this ignition finger to which he referred in this statement?

A It is marked No. 4.

Q What does that do?

A The ignition tripper finger is No. 4. It extends upward and presents a face to receive the effort from the engine through push rod No. 12 for rotating through a small arc rotor.

Q You had that same finger, that ignition finger, in all of the other forms of low tension magnetos which you had formerly developed?

A It had been in a vertical position in all of the forms. However, the edge was down instead of up. It meant a change in the movable electrode only.

Q Was that criticism if it was made a just and right criticism about it?

A It would not be a just or right criticism.

Q Why not?

A Because it had been my effort from the very beginning to fix it so that we could work with a direct thrust. In the single link machine to which I have referred, and the double link machine, they both carry that feature.

Q Both work in the same way?

A Both work in the same way so as not to change—so as not to have to change the cam shaft of the engine.

Q That was the reason for having the finger point up?

A It was not necessarily the reason for having it point up. It would work either up or down, just so it was in the vertical position.

753 Mr Bulkley: If your Honor please, it is stipulated, as

I understand it, by Mr. Williams, that the bill of \$82 and some cents, being the bill for services of Brown & Williams, rendered to Mr. Milton for the preparation of his application of October 1910, was paid by the Webster Electric Co. Is that right, Mr. Williams?

Mr Williams: Yes. I believe I gave you the date, did I not, when it was charged to the Webster Electric Company?

Mr. Bulkley: No, I do not think that I heard the date.

Mr. Williams: What was the date?

Mr. Bulkley: That can be added to the stipulation.

Mr. Williams: I will stipulate the fact, but I would like to just put in the date, when that was.

Mr. Bulkley: Very well. Now, I am going to offer two more letters from Mr. Milton to Mr. T. K. Webster.

Mr. Williams: May I interrupt, to say that the bill was paid, or charged to the Webster Electric Company, on March 31, 1911.

Mr. Bulkley: Yes, The same (indicating letters) to be marked in evidence as Defendants' exhibits.

The Court: I think you testified, Mr. Milton, that you paid some part of the expense, somewhere along the line?

A Your Honor, I paid the filing fee of \$15, with a postal money order.

The Court: Yes. I remember that. That is all you paid?

A That was all.

Q Will you look at this letter, Mr. Milton, and examine it, and tell me, if you can, when you got it, and where you got it, and who wrote it, and whose signature there is to it (handing one of said letters to the witness)

A The letter of December 3, 1910, from Brown & Williams, addressed to me, care Webster Electric Company, 754 Tiffin, Ohio, which I received in due course.

Mr. Bulkley: Offered as Defendants' Exhibit, to be marked defendants' exhibit number 34.

Mr. Bulkley: Q Look at this letter, and tell me about that (handing the other of said two letters to the witness).

A Letter of February 9, 1911, from Brown & Williams, addressed to me, care of the Webster Electric Company, Tiffin, Ohio,—which I also received.

Mr. Bulkley: Offered as Defendants' Exhibit 35.

Mr. Bulkley: Q Look at this letter (handing another letter to the witness).

A Letter from Mr. Lynn A. Williams, of February 7, 1911, addressed to me, care of Webster Electric Company, Tiffin, Ohio, which I received shortly after that time.

Mr. Bulkley: Letter of February 7, offered Exhibit 36.

Mr. Bulkley: Q How about this letter, that I now show you (handing another letter)?

A Letter from Mr. Lynn A. Williams, of October 25, 1910, addressed to me at Tiffin, Ohio, which I received with the formal application for a patent, to be executed by me, on my United States case No. 10.

Mr. Bulkley: Offered, letter of October 25, 1910, and marked as Defendants' Exhibit 37.

Mr. Bulkley: Q What is this letter which I show you (handing another letter to the witness)?

A This is a carbon copy of a letter which I addressed to Mr. Webster, care of the Webster Manufacturing Company, Chicago, Illinois February 8, 1911, dealing with my United States patent application No. 589,564, which was my case No. 10.

Mr. Bulkley: Offered, to be marked Defendants' Exhibit 38.

Mr. Bulkley: Q What is this one (handing another document to witness)?

A This is a carbon copy of a letter which I wrote from 755 Tiffin Ohio, October 10, 1910, to Mr. T. K. Webster, care

Webster Manufacturing Company, Chicago, dealing with the same subject matter as the immediately previous letter.

Mr. Bulkley: Offered, marked Defendants' Exhibit 39.

Mr. Bulkley: We offer in evidence a letter of one Waterman to Experimental Department, Harvester Company, under date of February 16, 1909, which has been identified in evidence, to be marked as Defendant's Exhibit 1.

Mr. Bulkley: We also offer in evidence a letter of April 6, 1909, from Waterman to Maurice Kane, heretofore identified in evidence as Defendant's Exhibit 2, to be marked in evidence as Defendant's Exhibit 2.

Mr. Bulkley: We also offer in evidence a letter of T. K. Webster to John L. Milton, dated May 21, 1909, heretofore identified in evidence as Defendant's Exhibit 8, to be marked in evidence as Defendant's Exhibit 8.

Mr. Bulkley: We offer letter to T. K. Webster, dated May 24, 1909, heretofore identified as Defendant's Exhibit 9, to be marked Defendant's Exhibit 9.

Also, letter of T. K. Webster to John L. Milton, dated May 1, 1909, heretofore identified in evidence as Defendants' Exhibit 10, to be marked in evidence as Defendants' Exhibit 10.

Also, letter of T. K. Webster to J. Milton, dated May 6, 1909, heretofore identified in evidence as Defendants' Exhibit 11, to be marked in evidence as Defendants' Exhibit 11.

Also, letter from T. K. Webster to J. M. Milton, May 8, 1909, heretofore identified in evidence as Defendants' Exhibit 12, to be marked in evidence as Defendants' Exhibit 12.

Also, letter of T. K. Webster, Webster Manufacturing Company, May 8, 1909, heretofore identified in evidence as 756 Defendants' Exhibit 13.

Also, letter of April 22, 1909, T. K. Webster to John L. Milton, heretofore identified in evidence as Defendants' Exhibit 15, to be marked in evidence as Defendants' Exhibit 15.

* * * * *

Mr. Bulkley: Look at this letter, please, Mr. Milton, and state where you got it, where it came from, who wrote it, and when you got it.

(another document was handed to the witness).

A This is a letter of June 2, 1916, from the Webster Electric Company, by Mr. Walter Brown, General Manager, addressed to me, at Detroit, Michigan, which I received on the sixth of June, 1916.

Q Do you know when the last of those notes referred to in that letter were paid to you?

A June 12, 1916.

Mr. Bulkley: The letter of June 2, 1916, identified by the witness, is offered, and marked Defendants' Exhibit 40.

* * * * *

Mr. Bulkley: Q Look at this letter; what is that, when did you get it, and from whom?

(The document was handed to the witness.)

A Letter of November 19, 1915, which I received in due course of time, from Mr. Lynn A. Williams, addressed to me at Detroit, Michigan, which I received.

Mr. Bulkley: Letter of November 19th offered, and marked as Defendants' Exhibit 41.

* * * * *

Mr. Bulkley: Q Look at this letter, and tell me if you know anything about that, and when you got it.

(Counsel hands document to witness.)

A This is a copy of a letter, a carbon copy of a letter 757 that I dictated to Mr. M. V. Couchman, International Harvester Company, at Hamburg, from the Anglo-American Oil Company's office, London, England, under date of November 10, 1909.

Mr. Williams: Let me see that a moment, before you proceed, will you?

(Document handed to counsel.)

Mr. Bulkley: Offered in evidence, the letter of November 10, 1909, marked Defendants' Exhibit 22-A.

Mr. Bulkley: Look at this letter, and tell me about that (handing document to witness).

A Another copy, of the same letter.

Q Look at this one (handing another document to witness).

A A carbon copy of a letter, that I sent to Mr. Lynn A. Williams, under date of November 29, 1915, from Detroit, Michigan.

Q Which one of those was it that I showed you (indicating two papers)?

A The carbon copy (indicating).

Mr. Bulkley: Letter of November 29, 1915, offered, marked Defendants' Exhibit 42.

Mr. Bulkley: Q Look at this letter (handing same to witness). What is that?

A This is a letter, a carbon copy, dictated in the Anglo-American Oil Company's office, in London, under date of November 10, 1909, to Mr. T. K. Webster, President of the Webster Manufacturing Company, Chicago.

Mr. Williams: Q What was that last?

A Addressed to Mr. T. K. Webster, President of the Webster Manufacturing Company, Chicago, Illinois.

Q Let me see what that is.

(Letter handed to counsel).

758 A It was dictated by me.

Mr. Bulkley: Q Well, what did you do with it after you dictated it?

A Mailed it to Mr. T. K. Webster.

Mr. Bulkley: Offered, and marked Defendants' Exhibit 22-B.

Mr. Bulkley: Q Now, look at these two letters here, and give us the dates of them, and tell us where you got them, and all about them. (Handing two documents to the witness).

A Carbon copy of a letter dictated by me June 6, 1916, to Mr. N. S. Milton, National Bank of Kentucky, Louisville, Kentucky. The other one is a letter that was dictated June

6th, and written June 7th, 1916, and sent to the Webster Electric Company, Racine, Wisconsin, dictated by me.

(Objection to offer of first letter—offer withdrawn.)

(The document last referred to by the witness, as to the Webster Electric Company, Racine, was thereupon admitted in evidence, marked as Defendants' Exhibit 43, the same being in the words and figures following, to wit:)

Mr. Bulkley: Q Now, Mr. Milton, were you ever requested at any time, by Mr. Williams, or anybody representing the Webster Electric Company, to give to it what is called technically a concession of priority of invention to this same subject matter with which this lawsuit is concerned?

A Yes, I had a letter from Mr. Williams.

Q What did you understand to be meant by a concession of priority?

A Why, to concede that I was not the original inventor of this subject matter.

759 Q Now, how was that request communicated to you?

In writing, by letter, or orally?

A It came by letter, with an enclosed form for me to execute.

Q Have you got that letter?

A I have.

Q Will you produce it, please?

A There is the letter, and the form, and my reply is on the back. (producing papers).

Mr. Williams: Q What was your answer?

A There is the letter, the form, and my reply is on the back of the letter.

Mr. Bulkley: Q This reply does not appear to be signed, Mr. Milton?

A Well, that is a copy of my letter.

Mr. Bulkley: The letter referred to by the witness as having been received by him from Mr. Lynn A. Williams, dated September 11, 1916, is offered, together with the form, so-called, and the copy of the reply of Mr. Milton to the firm of Williams, Bradbury & See, on the back of one of those papers, is offered, and marked in evidence, Defendants' Exhibits 44, 44-A and 44-B.

(The said documents were thereupon admitted in evidence, marked respectively as Defendants' Exhibits 44, 44-A and 44-B, the same being respectively in words and figures following, to-wit:)

Mr. Bulkley: Q Now, Mr. Milton, going back again to the conversation which you had with Mr. Webster, when you learned that the Harvester Company would not permit the use of the boss any more for the attachment of the magneto, when did that conversation occur with reference to the time that you commenced to work with Mr. Kane?

760 A Oh, it was prior to that time. You of course have reference to the time when I started Mr. Kane to make the design.

Q Yes, sir.

A On this unitary structure.

Q Yes, exactly. Did you have any negotiations, Mr. Milton, with reference to the sale of your patents, including this patent No. Where is the patent in suit?

The Court: 1,280,105.

Mr. Bulkley: Yes, 1,280,105.

Q Did you have any negotiations with reference to the purchase of that patent and other patents of yours by the Webster Electric Company, or the Webster Manufacturing Company?

A I do not quite understand, Mr. Bulkley.

Mr. Bulkley: Yes. I thought that was the Milton number.

Q Did you have any negotiations with the Webster Electric Company, or the Webster Manufacturing Company, with reference to the purchase of your patent No. 1,096,048, being the Milton patent, covering the unitary structure?

A At any time?

Q Yes.

A Any representative of theirs?

Q Yes.

A Yes, sir.

Q When was that?

A According to my best memory the negotiations for the sale of those patents started sometime after January 1st, 1912.

Mr. Williams: Q What are you saying, Mr. Milton, please?

A Sometime after January 1, 1912.

Mr. Bulkley: Q And what resulted from those negotiations?

A The negotiations took form before I actually came in contact with the representatives of those companies, through

Mr. Walter C. Teagle, who was in conference with Mr. 761 Becker, and I believe other representatives of the Webster Company.

Q Then what happened? What resulted? Were they purchased from you?

A It resulted—

Q This patent, and others?

A It was purchased from me, according to my best memory, in April, 1912, or their agreements were signed about that time.

The Court: Q Do you mean selling your patent to the Webster people?

A Selling it to the Webster Company.

Mr. Bulkley: Q What Webster Company? Do you remember what Webster Company?

A Well, as I remember it, the Webster Electric Company, and Webster Manufacturing Company were both parties to it. There were a series of contracts, some six or seven of them, dealing with licenses, and—

Mr. Bulkley: We will show that to your Honor later.

A It was a very complicated settlement. I have all the papers here, however.

Q Did you have any patent attorney or patent counsel in connection with this patent which you obtained, and which structure, except Mr. Lynn A. Williams?

you sold to the Webster Company, covering the unitary

A I did not.

Mr. Bulkley: Q Or in connection with the interference proceedings?

A I did not.

Q Mr. Milton, I believe that I forgot to ask what your present occupation was. Will you tell us that?

A Ignition engineer.

Q And by whom are you employed now?

A I am not working for anybody; I am working for my own account.

762 Mr. Bulkley: That is all.

Cross-Examination by Mr. Williams.

Q Mr. Milton, how long have you and I been acquainted?

Mr. Bulkley: Just a moment, Mr. Williams. There is one inaccuracy of statement in this record here; I do not know

how it crept in; and I would like to ask the witness, with reference to it, not directly in connection with—Mr. Milton, that conversation which you and Mr. Podlesak had, when the Merwin engine was there,—who suggested the extension of the pad from the igniter opening?

Mr. Williams: I object to that, as being leading.

The Court: Oh, he may answer.

A That was my own suggestion.

Mr. Williams: Is that all, Mr. Bulkley?

Mr. Bulkley: Yes.

Mr. Williams: Q How long have you and I been acquainted?

A From, I think, 1907; I think it dates back to 1907 or 1908.

Q You and I have had a good many and pretty frequent conferences about all these matters that you have testified about, have we not?

A Quite a number of them.

Q Well, we have had scores of them, have we not?

A I have not chalked up the record, but I know we have had a number of conferences on the various cases that you have handled for me. I think you have handled from case No. 5— You handled three, four, five, on through to fifteen.

Q Now, you said during your direct examination that you had been inspired to right some wrong. Now, who was guilty of the wrong that you are righting?

A In the testimony, as is on file in the case here, as given by a number of different parties, it seemed to me to be very inaccurate.

763 Q Who were those parties?

A Mr. T. K. Webster, and Mr. Chiville, and Mr. E. J. Kane, and Mr. J. A. Munn, as I recall them now,—the inaccuracies of each one of their statements, as it appeared to me.

Q And who was wronged by these inaccuracies?

A The subject matter of invention, of which I am very jealous,—the claims of that patent were taken away from the patent, and put into another patent.

Q Well, you are the party wronged, then?

A Yes.

Q I beg pardon?

A Yes.

Q You mentioned a man by the name of McCarthy, if I understood correctly, during your direct testimony. He, if I

understood, had nothing to do with experimental work, but rather with commercial manufacture, in connection with the Webster Manufacturing Company's plant; is that correct?

A He furnished us with parts, and occasionally would lend us a man for this experimental work; sometimes the work would be done in his shop, under my direction, or sometimes the man would come up to our department, and work.

Q Do you know where he is located now?

A He is in the employ of the Webster Manufacturing Company, Skillin & Richards plant.

Q The what?

A The Skillin & Richards plant; I do not know the rest of the style of the firm.

Q Have you seen him recently?

A I saw him either last week or week before.

Q About this matter you have been testifying about?

A Yes, sir.

Q Where is this man Kroeplin located, that you have referred to?

A He is here in Chicago.

764 Q Do you know where he is employed?

A He is working for himself. I do not know the style of the firm. He was in the courtroom here at noon today.

Q He was? When did you see him last before seeing him here this noon?

A I have seen him two or three times since this case opened.

Q And talked with him about these matters that you have been testifying about?

A Yes, sir.

Q You said you talked with one of the Podlesaks up at Racine, if I remember correctly, within the past month, about these same matters?

A The early part of December.

Q How?

A The early part of December, or the last of November.

Q That was Emil Podlesak, was it?

A Emil Podlesak.

Q Now, Henry Podlesak, have you talked the thing over with him?

A I have.

Q When?

A Since the case has opened.

Q Whom else have you talked the thing over with, in the last month or two or three?

A Do you mean the lawyers or the experts or individuals?

Q Individuals, as you draw the distinction?

A People disconnected with the case.

Q What?

A People disconnected with the proceeding?

Q Tell me whom you have talked with, separating them.

A I have talked with Mr. Sturtevant, Mr. Mason, Mr. Peeks, Mr. Carter, Mr. Bulkley, and I have talked to you; I have talked to Mr. Walter Brown; I have talked to Mr. McCarthy. And do you want everybody I have talked to.

Q Well, you know, people like Kroepin, or Podlesak, or McCarthy, or Manning, or any of those people.

A I talked with Mr. McCarthy, Mr. Kroepin, Mr. Robert Freeman.

Q Mr. Robert Freeman?

A Yes, sir. I talked with Lou Solomon.

Q Anyone else?

A Talked to Mr. Murphy.

Q Anyone else?

A Yes, sir.

Q How?

A I think so.

Q I hardly hear you?

A I think so. I am trying to recall all these different parties. There are a great many of them. It has been a general topic for conversation for pretty nearly four weeks, and I have talked to—

Q Mert Merwin? Did you talk with him?

A I was just going to mention Mr. Merwin. Mr. John Anderson. Mr. George Fife.

Q Mr. George who?

A Mr. Fife, F-i-f-e.

Q Fife?

A There may be some others. I think that's the ones you mean—

Q Who is this Mr. Freeman?

A Robert Freeman was one of the engineers of the Webster Manufacturing Company.

Q Where is he employed now?

A He is still with the Webster Company.

Q Who is this Solomon?

A He was the engine expert of the Webster Manufacturing Company.

Q Where is he employed now?

A He is still with the Webster Manufacturing Company.

766 Q Who is this William Murphy?

A He was with the Sales Department of the Webster Manufacturing Company, and attended some of the State Fairs in connection with the exploitation of the Milton Magneto in connection with the Harvester Company.

Q Where is he employed now?

A The Webster Manufacturing Company.

Q When you say Webster Manufacturing Company, you are distinguishing it from the Webster Electric Company, the plaintiff here?

A Absolutely, yes, sir.

Q Who is John Anderson?

A He is the foundry manager of the Webster Manufacturing Company and a stockholder in the company and he has charge— But he is no longer with the Webster Manufacturing Company.

Q Where is he now?

A Here in the court room.

Q Where is he employed, if you know?

A I think he is not employed by anybody. I think he is a retired capitalist.

Q You mentioned George Fife. Who is he?

A He is connected with the foundry of the Webster Manufacturing Company. He was very active there.

Q He was what?

A He was very active there at the Webster Manufacturing Company when they were here in Chicago.

Q Where is he employed now?

A I don't know just what his commercial relation is at the present time.

Q Where is he located?

A He is here in Chicago.

Q Do you think of others that you have talked with?

767 A I have talked to Mr. Manning.

Q Well, I mean other people that had any relations with any work of yours prior to 1911, say.

A I don't recall any others right now.

Q Now, as to the papers to which you have been referring, most of those papers which you have identified are papers

produced from your own files, are they not, and turned over to counsel who submitted them to you?

A Yes, sir.

Q Now, you have a lot of other papers here in addition to those, have you not?

A I have a great many other papers.

Q Relating to your work while you were connected with the Webster Company, are they, those papers?

A Some of them deal with that subject. Some of them deal with general correspondence of a personal nature that took place about that time.

Q Have you shown them to counsel for the defendant, those papers?

A No, I don't believe I have shown any of those papers to counsel other than this complete file of my application in case No. 10.

Q You have here other papers that you have been over with them, have you not?

A I don't believe I have other than what is in this particular file.

Q I don't know about the particular file. I am talking about letters.

A That is the file in case 10.

Q I would like to know if you have other papers here which you have talked over with counsel for defendants, and which have not been submitted to you on the witness stand?

A I have.

768 Q Those you have here?

A I have.

Q Where did you get those papers; all the papers, the ones that have been shown to us and those which have been offered in evidence here; where did you get those papers?

A I think every paper without exception came from that same steamer trunk that you and I opened together in Detroit.

Q When was that?

A When you were there in October of 1916.

Q So that all that have been offered and all that you have brought with you as having any possible bearing upon anything that relates to the subject matter of this suit, they all came out of that same trunk, did they?

A I think every one of them did.

Q That trunk was down in the basement of your apartment building in a little store room, wasn't it?

A Yes, sir.

Q And you and I went down there one night right after dinner, didn't we?

A Yes, sir.

Q And we got that trunk open?

A Yes, sir.

Q And we went through every single last paper in that trunk did we not?

A We did not.

Q Didn't we?

A We did not.

Q What?

A It would have taken two or three days to have done that, I believe. We went through the files that I thought would have a bearing on that matter. It was my general files; it was the case No. 10, and miscellaneous blue prints, miscellaneous patents, sketches, and copies of patents, 769 as I recall it.

Q Were you searching honestly when we went through that trunk for anything and everything that might have any possible bearing upon the subject matter of this patent of yours?

Mr. Peaks: I object to that. I would like to have that question read.

(Question read)

Mr. Peaks: I object to the word 'honestly' in there.

Mr. Williams: I would like to have the objection sustained if it should be, and I will ask another question.

The Court: Ask your other question.

Mr. Williams: I will substitute the word 'diligently' for 'honestly.'

A As time would permit and my knowledge of the case at that present time, I made a thorough search to give you everything that I thought would help you. I went further and sent to Louisville and got more papers that I thought would help you, because I was very anxious to set up that date and maintain it.

Q Then we went over those other papers, later, did we not?

A I did.

Q Mr. See did, from my office, didn't he?

A Mr. See and I made another search together, yes, sir.

Q Went through those papers from Louisville?

A I don't think we went through all of them. I doubt if we went through any of them, because I went through those papers and didn't find anything that had direct reference to this particular case, other than what I had already presented to you.

Q To me?

A Yes, sir.

Q That is the result of getting the papers from Louisville, and to the best of your ability, making a diligent search and study through them did not reveal anything of any pertinence other than what I had ready learned at the time of my search with you, is that it?

770 Mr. Peaks: I object.

The Court: He may answer that.

A As the conditions had developed at that time, there was nothing that impressed me or my mind as being of any further importance, and further bearing on it.

The Court: Did you later find that those things were important?

A I did.

Mr. Williams: Those other important papers have been offered in evidence here, have they, those you refer to?

A Yes, sir.

Q Which papers are those?

A They are the blue prints that refreshed my memory very considerably on various stages and developments from the Longenecker type of machine through to the completion of the Unitary plug, magneto bracket structure.

Q That is to say, these blue prints which are marked defendant's Exhibit 17—

A That is it

Q Just a moment. Defendants' Exhibit 18 and Defendants' Exhibit 19, are they?

A Those three are.

Q Now, these other blue prints, Defendants' Exhibit 21—That, as I understand you, was one that I had seen when you and I—that I had seen with you, and which we have known all about from the beginning?

A Another print of the same tracing, but not this particular piece of paper.

Q A duplicate?

A Yes, or it may have been an assembly of that same subject matter, I cannot say at this time, because I don't remember definitely, but it was the same unitary structure.

Q And the approximate date of this one is June 3, 1909?

771 A I judge that it was; I cannot say definitely because I have not the prints before me.

Q It was not earlier than that, was it, in date?

A I hardly think it could have been.

Q You do not know of any other than shows what is shown in this Exhibit 21 on a date earlier than June 3, 1909, do you?

A I don't know of any.

Q You would know now if you are ever going to know, I presume?

A I would say so—

Q Now, these three Defendants' Exhibits 17, 18, and 19, those, as I understand you, are important papers which for some reason or another were not discovered at the time of my search with you, or at the time of Mr. See's search with you, is that correct?

A I think at the time of Mr. See's search two of those papers were unearthed.

Q Which two?

A This one and—

Q Marked what?

A 17 and 18, I think.

Q 17?

A 17 and 18.

Q Neither of these shows the subject matter of your patent No. 1096048?

A (It does not show the subject matter of them)

Q Nor does the other important one there, Exhibit 19, does it?

A It in itself does not.

Q I talked to you about this date of October 6, 1915, did I not?

A October 6, 1915, was the date.

Q And we went through this trunk together, and we picked out everything that at that time either of us thought could have any possible bearing upon the subject matter of the interference; and did I bring those papers with me, take them away with me?

772 A You took one blue print, and took a memorandum for the rest of them, and Mr. See got the ones he wanted on his return, but we did not go through all the trunks; we only went through certain sections of files that we thought had a bearing on it. The date there had some 25 or 30 patent applications besides the correspondence extending over a

period of 10 or 15 years, so we did not go through all of it, I know.

Q We worked there until about midnight, didn't we?

A Until the train time, I would say.

Q It was pretty near midnight when we quit looking, wasn't it?

A I know it was quite late.

Q You said at that time to me, didn't you, that we had seen and found there everything that there was relating to the matter so far as you knew, except that there might be some further papers possibly in Louisville; isn't that substantially correct?

A I don't think that I ventured a statement of that kind, because I know it means a lot of work to make a full search, and this print No. 17, is just an illustration of what I say. This Exhibit 17 was one print I found—I didn't find until last Sunday, and I have been through that trunk a number of times since looking for that and found it in a stray file. It did not come from Louisville.

Q Have you been through everything in the trunk now?

A I have not.

Q There are still things there now?

A There are things that pertain to other subjects that I am sure have no bearing whatever on this.

Q Were you equally sure when you and I stopped at midnight on October 6th that you had found everything that had any bearing upon the subject matter here?

A As I recall it, your insistence was to find something, some sketches that you could use to substantiate the date,
773 some sketches where I had shown it to somebody else that I was sure I did not have.

Q And you never have found anything like that?

A I have not found anything like that.

Q Now, when I left Detroit, left you that night, you told me that you would send to Louisville or go to Louisville and get some additional papers?

A I did.

Q And you got those papers?

A I did.

Q And then you went through them, did you not?

A I have been through them.

Q Did you advise me subsequently that nothing further—that you could find nothing further in it?

A I think that I told you in person that I had been through

them and did not find anything of the character that you were looking for, or any prints or drawings that would show that particular device.

Q Then it was on May 8, 1916, following this search which you and I made that Mr. See of my office met you in Detroit, was it not?

A I judge it was about that time. I have the exact date here recorded if you want it.

Q Let us have it. You have letters that will fix that, have you?

A Yes, sir.

Q Won't you look at them and fix that date?

A The letter of Mr. Robert M. See addressed to me in Detroit, starts: 'Dear Mr. Milton: As I promised this is to make a record of the facts that I have taken from among your data relating to the Milton case 10, the following items.'

Q Perhaps since you have read that you better read the rest, read the list.

A '1. Photograph of experimental magneto on the Brundage engine. 2. Photographs of new magneto on International Harvester engine. 3. Three photographs of the new magneto disassembled and assembled. 4. A leaflet entitled 'Milton Magnetos' published by the International Harvester Company. 5. Booklet entitled 'Milton Magnetos' published by the Webster Manufacturing Company. 6. A booklet entitled 'Webster-Milton Low Tension Magneto', published by Webster Electric Company. We appreciate very much indeed'—Do you want the rest of it?

Q Yes, I think you better read all of it.

A 'We appreciate very much indeed the time and help you have given to this matter and personally wish to thank you for a very pleasant morning. It will be a great help to us if, as soon as you get to Louisville next week, you will look through your data there and send us anything that you think has a bearing on this matter, since we must decide what is to be done and act accordingly within the next couple of weeks. We hope that you can find time to pick these matters out and send them to us, if there are any, soon after you reach Louisville. Yours very truly, Robert M. See.' Did I give the date—May 9, 1916.

Q May 9th?

A May 9, 1916.

Q Does that indicate to you that it was May 8, 1916, that Mr. See talked with you in Detroit?

A It does indicate to me that it was on May 8th.

Q Now, when Mr. See talked with you he asked you not only relative to such papers and documents as you might have, and also relative to who would or might know anything about what you may have done relative to the invention involved, did he not?

A Yes, sir.

Q And you gave him the names of Abbott Munn, Gerald Chiville, and E. J. Kane as the parties who would know about what you may have done and who could corroborate your statements about the matter?

A I undoubtedly gave him those names.

775 Q Did you in talking with him, or in talking with me, ever make any reference whatever to this Robert Freeman as knowing anything about this matter?

A I am quite sure that I did.

Q What?

A I am quite sure that I mentioned it to you.

Q What did you say about him?

A That he was one of the engineers there at the Webster Company and occasionally did drafting on this matter.

Q Did you ever mention Solomon to either of us?

A I cannot say definitely whether I did or not.

Q Did you ever mention Murphy to Mr. See in talking with him?

A I am very sure I did not. I had forgotten Murphy entirely myself until this last month.

Q Did you mention this John Anderson to him?

A I don't think I did.

Q Did you mention to him this George Fife?

A I hardly think I did.

Q Did you mention to him Henry J. Podlesak?

A I may not. I don't remember whether I did or not.

Q Did you make any memorandum of the conversation, that is, any memorandum made at the time of that conversation that you had with Mr. See?

A I did not because I hated to give even an hour's time at that time to the subject. I was terrifically busy.

Q Talking with Mr. See did you ever mention this man Merwyn?

A No.

Q We both had asked you to give us the names of any people who might know anything about the matter, had we not?

A Yes, sir.

Q Now, when Mr. See talked with you on May 8, 1916, you

went over with him about all the papers and documents
776 which you had then been able to find, and which to you
seemed to have any possible bearing upon the subject
matter?

A The ones that I had gathered at that time.

Q And you promised him that when you went to Louisville
about the middle of the week of May 15th following that, you
would search there and see if you could find anything further,
did you not?

A Or else get drawings and then go through the draw-
ings which I did.

Q You didn't find anything?

A I did not find anything that would be of the nature
asked for by you or Mr. See.

Q Are you making some point of the fact that he did not
ask for—

A Oh, no, no.

Q —that we didn't ask for right now?

A No, no point on that at all.

Q You understood when we were making these searches
that you were looking and we were looking for anything that
would either show the invention or might refresh your recol-
lection or enable you to fix dates with regard to it, did you
not?

A I do not recall it as being so much in connection with
refreshing my recollection of it, as trying to get something
with which to fix the date.

Q In talking with Mr. See on May 8, 1916, you told him
the history of this magneto during the year 1908, say, and
particularly, among other things, of Longenecker's adapting
or making the tripolar oscillating form of machine, did you
not?

A Longenecker—I could not have given it that way, be-
cause Longenecker didn't make a tri-polar oscillating ma-
chine. You mean the bracket for operating it, or the mech-
anism for operating it?

Q Isn't this the oscillating—he took the Milton tripolar
machine, as I understand it, and made of it an oscillator?

A Yes, sir.

777 Q By applying springs and so forth.

A Yes, sir.

Q That is what Longenecker did?

A Yes, sir.

Q And that you told Mr. See about?

A I judge I did.

Q Now, when you talked with Mr. See on May 8, 1916, you told him, did you not, that you remembered distinctly during the experimentation to improve on the construction that T. K. Webster called in Mr. Chiville and Mr. Kane, and told them to work out at home, independently of each other, the best design that they could?

A I don't recall that as having been given exactly in that way, but I remember referring to the two men as having worked on it.

Q Didn't you tell Mr. See in substance that you remembered distinctly of Mr. Webster telling both of them to work on the thing at home, independently of each other, and to bring in what they might produce?

A I don't recall that conversation exactly that way. In fact, I don't recall that conversation exactly in any way. I remember talking on the general development.

Q Did you give Mr. See the substance of that statement that I have just given to you, in your talk with him?

A I won't say that I did or that I did not, because I don't remember specifically on that; I made no record of that conversation.

* * * * *

Q Just to get this matter straight, your talk with Mr. See was at Detroit?

A Yes, sir.

Q And there was a later conference in Chicago?

A Yes, sir.

Mr. Williams: Lots of them.

A I think you will find in the report there that I stated to Mr. See that I was very sure that I was the original
778 inventor and that I still believe that I was.

Q You say that was in this report?

A I think if Mr. See made the full report, I think you will find it there.

* * * * *

Q Would this correctly state the substance of what you have just volunteered, that you were very pleasant and expressed the desire to help us in any way that you could, and seemed willing, if need be, to sign a concession of priority to Kane, although you hoped investigation would show that you were the real and prior inventor?

A I could not have agreed to sign the concession of

priority, and I was positive in my own mind that no such facts existed.

Q Now, at the time that you talked with Mr. See on May 8, 1916, did you tell him that although both Chiville and Kane did work on some design at home, that you could not remember what Chiville suggested?

A Why, I don't remember making a statement in that way. I do know that a general conversation took place in the midst of a very busy morning, as all my mornings were, and I gave him as much information as the time would permit, but I was not able to—I did not state the matter in detail.

Q Did you on May 8, 1916, tell Mr. See that the pencil drawing on white paper signed 'E. J. Kane, April 11, 1909,' is a design that Kane worked out at that time, and that you remembered distinctly Kane submitting it to you?

A I don't think that the thing was put up to me in just that way, or if I made my statement in just that way. I would say, as I have said here, that that design was worked out under my direct instruction, and I remember the preceding designs that went ahead of that, and I remember how that thing was developed, and I remember the next stage from that. And I don't believe that—

779 Q I think I will confine your answer, if you will, to answering the question. The question is whether you said that or substantially that to Mr. See on May 8, 1916, namely that the pencil drawing on white paper signed 'E. J. Kane, April 11, 1909,' is the design which Kane worked out at that time and that you remember distinctly of Kane submitting it to you; do you remember telling Mr. See that in substance?

A Not exactly that way.

Q Where do you say now that Kane made this drawing dated April 11, 1909?

A I won't venture any statement on that. I do know that the ideas there were worked out—

Q Won't you please answer my question? The question is where he made that.

Mr. Peaks: I object to the witness being interrupted.

The Court: That is the only question, where he made it. If you don't know say you don't know.

A I don't know.

Mr. Williams: Q Do you remember Kane submitting that

drawing to you after April 11, 1909, after it was made as it is now?

A I don't recall it having been submitted as you present it to me now.

Q Did you tell Mr. See that you thought that that drawing of April 11, 1909, must have been made by Kane at a date somewhat earlier than April 11, 1909?

A I don't recall that at all.

Q Did you tell Mr. See that you remembered criticising this design shown in this drawing dated April 11, 1909, because the bracket was of such form that the part would quickly work out of alignment?

A I don't think I said that.

Q Mr. See had with him at the time of this conference, did he not, this drawing of April 11, 1909, the one you have referred to here?

780 A I judge it is the same drawing. But I have no way of identifying it.

Q You have no way?

A No.

Q He had with him also at the same time, did he not, and showed you in talking with you this other buff colored drawing marked Plaintiff's Exhibit 18?

A I have no way of identifying that, but I believe it to be the same drawing. I remember he had one.

Q Now, those photographs which you turned over to Mr. See were made, were they not, with a camera which you purchased while you were in Europe?

A The three photographs showing the magnetos disassembled, if those are the ones to which you refer, they are.

Q Therefore, those photographs were made by you after your return from Europe in December, 1909, were they not?

A That camera was purchased on my trip to Europe in 1907. It was purchased on the trip of 1907.

Q Well.—

A I will say—

Q And is this the fact of the matter, that those photographs, those pictures,—that in taking those pictures you were making a first test of the camera with a Celor lens which you had obtained from Mr. Jackson, when you traded the camera with the Dagor Lens, which you had brought from Europe, and you didn't go to Europe until August, 1909?

A That is all very incorrectly stated.

Q How?

A That is very incorrectly stated.

Q What is the fact?

A I don't remember of mentioning that to Mr. See, but the fact is this—

781 Q What is the fact as to when these particular photographs were taken?

A I purchased a Dagor Goerz lens in Europe and brought it back, brought it over and traded to Jackson and got a Celor-Goerz lens, and I had never taken any indoor photographs of objects of that nature with the camera, and I remember trying it out, and that was done before I went to Europe in 1909, because they were taken up on the third or fifth floor of the Webster Manufacturing Company, and I have never been in that building or that part of the building since my return from Europe in 1909.

Q Then the photographs were taken before you went to Europe in August, 1909?

A They were made before I went to Europe in August, 1909; I think they were made in June.

Q This Freeman that you have mentioned, was that R. G. Freeman?

A Yes, sir.

Q Did you tell Mr. See that he would not know anything about matters relative to which Mr. See was conferring with you?

A If I mentioned him, which I believe I did, I very probably said I doubt if he would know very much about it.

Q You have a lot of correspondence, haven't you, with reference to efforts made by me or others associated with me to arrange a date for you to give your testimony in this interference between you and Kane?

A I have some correspondence on it.

782 Q Now, this conference between you and Mr. See at Detroit, on May 8, 1916, was in conformity with an appointment made in advance by a letter and telegram, was it not?

A I think it was.

Q Did you receive a letter in due course of mail dated May 3, 1916, and signed by me or Mr. See or by our firm name, saying that we were making a final investigation of the facts in the interference between this patent of yours and the

Kane application, and asking for an appointment on Monday, May 8th?

A Yes, I remember such a letter.

Q Now, when Mr. See came there to see you on May 8, 1916, he had with him, as you say, these two Kane drawings of April 11 and April 14, 1909; and those you talked about. Were there any other papers which he brought with him at that time and which you discussed?

A I don't remember whether he had other papers or not.

Q Did he show you at that time the affidavits of Munn or Bruce or any of the parties that you previously named as parties who would know about the facts?

A I don't recall anything of the kind.

Q Didn't Mr. See tell you that he had been talking with these people whose names you had given as your corroborative witnesses?

A That did not make a very definite impression upon me, that whole meeting, or what transpired in that meeting. I don't remember distinctly about those points. I don't remember definitely.

Q Did Mr. See tell you what these Kane drawings purported to be, or how he had gotten hold of them or anything about them?

A I think you told me that, and I think he reviewed it.

Q What?

A I think you told me about these drawings.

Q When I saw you in October previously?

A I don't know whether it was October previous, or some time in your office.

783 Q During the interval between October and May?

A Yes, my impression is that you told me about these drawings, or similar drawings; I would not say these same drawings, but similar.

Q When you talked with Mr. See on May 8, 1916, and when he had what you say are these drawings, the same things as near as you can now identify them, you understood, did you not, that those drawings had been acquired at that time by us from Kane, didn't you?

A Yes.

Q Didn't Mr. See tell you anything about what Kane said as to the fact of inventorship?

A Yes, but I could not quote his words at all.

Q What was the substance of it?

A The substance of it was that Kane was claiming—that Kane had claimed to be the original inventor of that subject matter.

Q Didn't he tell you at that time anything about what Chiville had said?

A I don't recall definitely whether he did or not.

Q Let me see if you don't remember this now; didn't he tell you in substance this: That when he talked to Chiville, or when we had talked with Chiville, some of us, that Chiville said that he and Kane both got up designs independently, at home, and brought their drawings to the office of the Webster Company; do you remember his saying that?

A I remember hearing about that; I don't remember Mr. See mentioning it that way. That was some time ago—

Q Didn't he tell you, or didn't some of us tell you, if you don't remember who it was, that Chiville said it was Kane who brought down for the first time and showed for the first time this design?

A I don't recall it that way at all.

Q Did not you get the idea from any of us that Chiville, instead of corroborating you as you had said that he 784 probably would, corroborated what we told you Kane would testify to; didn't you learn that at that time?

A I learned at some time during this period that Chiville would make a statement that he thought that Kane designed that.

Q Didn't you learn from some of us also that Mr. Munn, Mr. Abbott Munn, whose name you had given us as one of the witnesses who would know most about the facts and would corroborate you, that when we went to see him he gave us information which failed to corroborate you absolutely?

A I understood that Munn was going—whether I got it orally or by letter, I don't think it was by letter, I got it orally from somebody, I think, that Munn was going to substantiate my claim and afterwards when Mr. See, or somebody, came over with some subsequent data, he had switched entirely. Now, I got that definite impression.

Q Whom did you get that from?

A I got it, I am quite sure, from you, or somebody in your office; I think it was you.

Q When was it we told you he switched?

A I don't know when it was. I think it was probably when Mr. See was over there.

Q Now, let me see if this does not refresh your recollection: You and I saw each other quite frequently during this interval here in Chicago; you were here frequently, were you?

A Yes, sir.

Q Didn't I first show you or state to you the substance of a letter which I had received from Mr. Brown of the Webster Company giving his conclusions as to an interview that he had had with Munn, in which Mr. Brown said that Munn knew of the invention having been made, or believed that you made it, or something of the same general statement, some general statement of that sort, and that when we came actually to talk with Munn that we found that he could not—that the facts were not in conformity with what Mr. Brown had written in his letter; isn't that the fact of the matter?

785 A It may have been that it came that way, but I got the definite impression, as I stated to you, that Munn was counted on to testify one way, that he switched. It may have come that way that I got that.

Q Did you get the impression that he switched his own ideas, and changed them, or that we found out that his recollection was different from what we believed it would be?

A I don't know how that came about.

Q We told you at any rate before any of this testimony was given, and you understood what Munn's recollection was, did you not?

A Before I gave my testimony?

Q Yes.

A Yes, sir.

Q That you understood?

A Yes, sir.

Q Had you seen his affidavit covering the matter at that time?

A I don't recall ever having seen his affidavit until Mr. Bulkley read sections of it.

Q I don't mean his deposition, his testimony; I mean his preliminary sworn statement; that is a statement concerning the matter sworn to by him before any testimony was taken. Do you recollect seeing that at any time?

A I don't recall that.

Q You don't recall that?

A I do not.

Q Now, can you by reference to your papers, or independently of them, state what efforts were made between you and me, or between you and my office, to make an appointment at which to take your testimony in this interference case?

A I know you tried a number of times to do it.

Q I did. Have you got papers that will enable you to give the date?

786 A I probably can find them.

Q I don't care to have you read all the letters, unless you want to, but if that will enable you to state exactly what occurred, I wish you would do it.

A I have a letter here of May 3, 1916, which is making an appointment to see me in Detroit. One of October 30, 1916, dealing with the taking of testimony. Another of December 1, 1916, dealing with the taking of the testimony. Another of December 18, 1916, on the same subject.

Q You say that those letters deal with the taking of the testimony. Will you say just briefly what they are, what the letters say.

A This one says, under date of December 1st: 'I wrote you with reference to taking your testimony in the Milton-Kane interference. Under date of December 5th you advised us that if you could possibly do so you would endeavor to give us the testimony before December 15th. That date is now past. The only way in which your testimony may be taken and used will be to stipulate that it may be taken *nunc pro tunc* I am not attempting to pronounce it—'as of the earlier date. If you can arrange to give your testimony within the next week or ten days, we are hopeful that it will be held not to be too late to be of value.— Will you, therefore, advise us immediately whether you can see your way clear to handle the matter within that time.' On December 27, 1916— Do you want the whole letter?

Q Just a moment. Is it not a fact that you wrote my firm under date of December 26, 1916?

A Yes, I wrote you on that date. I have a copy here.

Q That letter read as follows, did it not: 'The strain of breaking up our factory and office, as well as its organization, and trying to reorganize my home during the past two months has proven more than I can stand. Last Monday a week ago I left the office and have been ill and unable to attempt to do

any work until this morning. I find your letter of December 18th, which I regret has remained unanswered.

Even though there has been volumes of my work unfinished during this moving, and there still is, I will make every effort to give the testimony for which you have asked. I have not and will not have an opportunity to go through any of my records, so I would ask your representative to bring with him the records which we went over when I was in your office in Chicago. This will serve to refresh my memory on the subject. I would suggest that the testimony be taken in the afternoon and you have a preliminary conference in the morning of a given day. I do not know the significance or the ethics of taking the testimony of a later date as of an earlier date. As you suggest, before giving the testimony, I will get enlightenment on the subject. I regret that it has been physically impossible for me to try to attend to the business demands of my own company, and still have not found time to serve you in this matter.' Is that correct?

A Yes, sir.

Q Then did you receive a letter from my office dated December 27, 1916, acknowledging the receipt of your letter of December 26th, and saying that we note that you will in all probability be able to give your testimony in the Milton-Kane interference in a week or so. Almost any day that will suit your convenience will be all right with us?

A Yes, I have that letter before me.

Q And in that letter we suggested also, did we not, or proposed in that letter, did we not, that we would go to Cleveland and arrange to confer with you in the morning in order that your testimony might be taken in the afternoon?

A Yes, sir.

Q Then do you find a letter of December 1, 1916, to you from me or my firm?

A I mentioned that one. I have it here before me.

Q In that letter we asked: 'Kindly advise us, will you not, at your earliest convenience whether or not you see
788 your way clear to giving this testimony before December 15th.'?"

A The letter of December 1st?

Q Yes.

A Yes, that is here.

Q Now, the suggestion which you made in your letter of December 26, 1916, that we have a preliminary conference

in the morning, was for the sake of reviewing again all of these papers that had been accumulated by me and Mr. See in our previous conferences with you, in an effort to get together all the documentary evidence bearing upon this question of inventorship?

A And also in addition to that to prevent taking too much time continuously away from my regular work, which was very pressing at that particular time.

Q As I understand it, it was on January 4, 1917, that you gave your testimony in this interference between Kane and Milton, was it not?

A About that time. I have it exactly here. Your letter of January 5th carries a copy dated January 4, 1917.

Q You understood from them and from Mr. McCaleb at that time that the testimony on behalf of Kane had already been taken, did you not?

A It is my impression that you did.

Q Don't you remember our saying to you that we would put to you any questions that you might suggest in order to give you the fullest opportunity to tell the facts relating to the matter of his invention?

A Yes, I remember such a statement in substance, your statement was in substance that—

Q Don't you remember that we showed you at the same time, not a printed copy, but the typewritten copies of the testimony given by the other witnesses, that is, Kane and his witnesses, just before you testified?

A If you did, I did not read them because this whole thing was done in a very short period, probably an hour or an 789 hour and a quarter.

Q They were there and you were told before you finally testified at any rate what the testimony of Kane and Munn and T. K. Webster and these other parties had been, had you not?

A If it had been told to me it was not told to me in such a way that I could remember and repeat it.

Q You were explicitly given the opportunity by us at the time you testified on that very day, were you not, the opportunity to go over all of the testimony that had been given by Kane, and by his witnesses, and to refute it or rebut it in any way that you could. That is true, is it not?

A I do not recall having seen the copies of it, or even if they had been there I could not have taken time at that par-

ticular hour to have done it, and I mentioned to you, or before I went into Mr. McCaleb's office in connection with that, that I did not quite understand this sort of proceeding any way, where you could represent both sides of the case. I thought the thing was largely in your own hands.

Q What both sides did you refer to in saying that?

A Kane's side and Milton's side; that I felt whatever effort that I might make, that I would be absolutely helpless and the thing would be as you wanted it and so mentioned it.

Q To me?

A Yes, and you said that you would put the facts up to the Patent Office and let them decide. That was your answer. I remember that very distinctly.

The Court: Were the Kane application and the Milton patent both owned by the Webster Company then?

Mr. Williams: Well, now, I think the arrangement was, and I have seen some letters here which may indicate the contrary today, but I expect to look them up, I think the fact was that Milton had put his applications and patents at that time in trust to secure the payment of some notes, and 790 when the notes had been wholly paid by the Webster

Electric Company, then the trustee was authorized to execute an assignment to the Webster Company, and that in case the notes were not paid then the trustee was to make a transfer back to Milton, so that he had to that extent the beneficial interest under the trust, it has been my impression—I am answering it just as honestly as I can or as frankly as I can at the moment—it had been my impression that Milton at that time and for some little time thereafter had that interest in that trust arrangement. Now, some letter has been offered here today which may indicate that all the payments on the notes had been then completed. Is that correct?

Mr. Sturtevant: This testimony was taken January 4, 1917.

Mr. Williams: Yes.

Mr. Sturtevant: The notes had been paid seven months before, June 12, 1916.

Mr. Peaks: And Mr. Williams was the trustee.

Mr. Williams: I was the trustee. Now, I think the fact is that I was not advised by any one of the payment of those notes. I can look it up and make sure.

The Witness: This will refresh your memory. I told you in that letter that the title had passed.

Mr. Bulkley: But you say it does not make any difference whether he held the equitable title—

The Court: It might make a difference if he had a reversion in it.

Mr. Peaks: If the notes had been paid—

The Court: Then of course he would not have any interest.

Mr. Peaks: They were paid seven months before.

Mr. Williams: Q These two drawings, Plaintiff's Exhibits 17 and 18, dated April 11 and April 14, 1909, bore those dates, did they not, when we showed them to you, Mr.

See and I, in connection with the arrangement for the 791 taking of the testimony or the investigation of the evidence in the interference case?

A I believe they are the same drawings and the same dates.

Q Now, you know, of course at the time you gave your testimony in the interference case, that the Webster Company had acquired the Kane application, did you not?

A I remember your telling me they had bought it, I remember some of the conversation connected with it.

Q I told you why we bought it, didn't I?

A You told me that you had figured that it was cheaper to buy it than to fight it, that you estimated that it would cost about as much to fight it as the price you paid.

Mr. Williams: Q Don't you know and don't you remember it was a fact that when we started into get together the evidence that we hoped to find for the purposes of this interference, that when we started you were confident that you could find papers that would corroborate what you had told me were the facts as to your having made the invention?

The Witness: Yes.

Q And you started to work, and I will ask you whether I didn't have the appearance of having started that search enthusiastically and with the expectation of finding the things that would corroborate what you said.

Mr. Peaks: I object.

The Court: He may answer.

Mr. Williams: Q I am talking now about when we first began to make the search, when the interference was first declared.

A I don't remember your asking for anything more than sketches or drawings.

The Court: You don't remember about his attitude?

The Witness: His attitude was his usual diligence, I would say.

The Court: Which you would say was considerable.

A Considerable.

Mr. Williams: Q You were very confident, were you not, when we first began to make this search, that we were
792 going to find the things that would settle the matter beyond any question, in the form of papers?

A It has been my—

Q You told me that, didn't you?

A It has been my usual experience that any well defined truth could be proven, and I felt that way about this.

Q Aside from that, you told me, didn't you, that we were almost certainly going to find papers that would corroborate what you had told me as to the date of the invention and your having made it?

A I felt so sure, and I no doubt so stated it to you.

Q Did I say anything or by my attitude give you the slightest reason to doubt that I expected that you would find the things just as you expected to find the things?

A That is—

Q That is, at the beginning.

A Just at the beginning. I am trying to separate that from your attitude a little later on, which is a little bit difficult at this time. I believe I could say that you gave me that impression.

Q Do you remember a time when I told you that we simply could not find the evidence that would corroborate you in what you said, or substantially that?

A That you had not found it. That was at a considerably later date.

Q How much later? What was that?

A I don't know. It was considerably later. I rather think it was when we were preparing to take this testimony.

Q Do you remember my telling you that these corroborating witnesses whom you had named instead of corroborating your story corroborated what Kane had said?

A I remember your telling me that.

Q Did we have any interest in the Kane application at all when I first told you that, so far as you know?

793 A I am inclined to think that when you told me that was when we were taking this testimony. I don't recall

whether that was on your visit over there or whether it was at a later time. I can't separate it.

Q When was it that you say that I told you in substance that it would be cheaper to buy the Kane application than to fight the interference?

A I think you told me that you had done it. It was after it was done. That is my distinct impression of it.

Q That is, I gave you that as the reason for having bought the Kane application, did I?

A That was the statement as I got it.

Q How?

A That is as I got it.

Q From me?

A Yes.

Q Orally, or by letter?

A Orally.

Q On September 11, 1916, or within a day or so thereafter, you received from me, did you not, a letter in which I said to you the following:

"As opportunity has offered Mr. See has interviewed all of the possible witnesses as to the inventorship of the unitary plug and bracket arrangement which is involved in Interference No. 39013 between your patent and the Kane application, and I have just been reviewing all of the drawings and reports of inventors and the affidavits of the various parties. There is no question but what there is more definite and explicit corroborative evidence to support Kane's allegations than there are to support your allegations. Under the circumstances I am convinced that we would have a better prospect of sustaining a patent containing these claims if made by Kane than if made by you."

That is what I wrote you, didn't I?

794 A September what?

Q September 11, 1916.

A Is that the one in which you asked me to concede priority?

Q The letter goes on as follows:

"Under the circumstances we should like to file a concession of priority in favor of Kane and have drawn up such a form. Will you be kind enough to execute the original copy of this concession and return it to me at your earliest convenience?"

"Please be kind enough also to have two parties sign as

witnesses to your signature. For the purposes of your records I am enclosing an extra copy which you may retain.

"Yours very truly"

and signed by me.

A That letter was received and it is Defendant's Exhibits No. 44, 44-A and 44-B.

Q In spite of that letter and the extent to which it may refresh your recollection, do you still say that I told you that we acquired the Kane patent because it was cheaper to do that than to fight it?

A I got that from you some time; I don't know when it was.

Q You did not get that in writing, I presume?

A No.

Q This matter off— This other matter that you say I told you about, namely, that we would take the evidence and put the facts in the matter up to the Patent Office and let them decide, when was it I told you that?

A I think that was just prior to the taking of the testimony I think it was the same day.

Q Just before January 4?

A I think it was on January 4, just before I went into McCaleb's room.

Q That also was something that you got from me by word of mouth, was it?

A Yes.

795 Q Didn't I as a matter of fact write you a letter, dated October 27, 1916, which you received in due course of mail following that, in which I said to you:

"We have come to the conclusion that the best way to dispose of the Milton-Kane interference is to introduce proofs as far as possible on behalf of both parties and put it up to the Patent Office to decide as to who is entitled to a patent containing the claims involved in the interference. We shall wish shortly to take your deposition in support of your side of the interference and shall consider it a favor if you will advise us rather promptly as to the earliest date within the next two weeks when it will be possible for you to give your deposition."

A I judge that that letter reached me in due course, and still I am under the impression and my best memory is that that was substantially repeated at the time I mentioned before taking the testimony.

Q Have you got that letter there?

A What date is that?

Q October 27, 1916.

A I have your letter of October 30 acknowledging receipt of my letter of October 28 which was evidently in reply to that, but I don't see your letter of October 27.

Q Let me ask you if you find there a carbon of your letter to me dated October 28, 1916, which begins: "In response to your letter of the 27th we wired you this morning as follows." Do you find a carbon like that?

A No, I do not find that.

Q Look at this paper; does that refresh your recollection as to the receipt by you of a letter from me dated October 27, 1916, and reading as I have read it to you?

796 A Yes, I remember this letter.

Q (Indicating magneto) Can you identify this, Mr. Milton?

A That is one of the magnetos we used in connection with our high tension ignition.

Q What one is this?

A Which number?

Q Well, whether it was early or late. When did this come?

A I couldn't tell you. It is one of the last ones. Just exactly what is the date of it I probably could tell by going through my prints and records, but this is one of the last ones. There is a lot of Chiville's work in it; I recognize it.

Q Is that the sort of machine that was once sold to the Cadillac Company? I mean, on which the order, the Cadillac order of those 10,000 per year was—

A Substantially the same magneto. This looks as though it might have been made at Tiffin.

Q Is this a commercial product or experimental device that you have before you?

A This is what you might term a hand made device.

Q That is, it is not a manufactured product?

A I could tell more if it was complete, but it is not complete.

Q What is the other device called, this smaller one that I hand you?

A That is one that I considered making an application on that would have been Case 11; that was never filed. I never filed an application on it, and it never was finished.

Q What is that, a high tension machine?

A It is a low tension machine delivering current for a transformer coil.

Q When you first made the high tension machines how did they compare in size with the first of these that I have just now shown you, the one which you say has evidence of Chilville's work?

797 A They were larger.

Q How big?

A Well, the ones that were made in 1907 were rectangular. This is quite a bit smaller. We got down to a point where we were changing this by eighths of an inch in diameter, as I remember, and it is very difficult for me to identify these without having them side by side.

Q Why was it, with this high tension machine, that it was necessary to make it smaller, as you say, almost by eighths of an inch in diameter? Why was that so important in the high tension machine?

A A matter of clearance. This machine, as you remember, in its operation stood vertically on a bracket.

Q Under the hood of the engine of the automobile?

A Yes, on a bracket. And the timing was affected by swinging of the field in this form.

Q And you had to have room to swing it?

A And it was according to the clearance allowed on some of the cars. If the diameter should happen to be changed, some cars it was impossible to get it on.

Q Because there wasn't room enough under the hood and around the engine to put it on?

A Around the engine rather than under the hood.

Q For that reason you had to make them smaller in order to get them into the available space, as I understand?

A That was the idea. That was true of magnetos generally, because we kept finding interferences with practically every model we sent out on some engine or some motor, multiple cylinder or single cylinder.

Mr. Bulkley: If we may suspend the examination of Mr. Milton for a moment, to take Mr. McCarthy, who is here—

The Court: Certainly.

798 Mr. Bulkley: Just a few moments.

The Court: Yes.

ALBERT C. MCCARTHY, called as a witness on behalf of the corporate defendants, having been first duly sworn, testified as follows:

Direct Examination by Mr. Bulkley.

Q What is your full name, Mr. McCarthy?

A Albert C. McCarthy.

Q And what is your present business?

A Superintendent of the Skillin & Richards plant.

Mr. Williams: What is it? I did not hear you.

A Superintendent of the Skillin & Richards plant.

Mr. Bulkley: Q Is that Company connected with the Webster Manufacturing Company in any way?

A It is owned by the Webster Manufacturing Company.

Q Were you ever in the employ of the Webster Electric Company, and, if so, when? When were you employed by the Webster Manufacturing Company, I should say?

A From 1903 to 1918.

Q Did you ever know John L. Milton?

A Very well acquainted with him.

Q How did you first become acquainted with him?

A Why, Mr. Webster introduced me to him in his private office.

Q What did he say to you, when he introduced you to him?

A He says, "This is Mr. McCarthy; this is Mr. Milton." And I shook hands with him; and he says, "I want you to take Mr. Milton around the plant"; he says, "I have hired him—" he says, "to look after this magneto that we have here." And, after taking him around, he says, "I guess 799 he can find his way back. As near as I can remember, those were his words.

Q Did Mr. Webster say anything to you about taking instructions from Mr. Milton?

A Not at that time.

Q When was that? What did he say subsequently with reference to that?

A Well, Mr. Milton, I think, went to work a few days afterward, at the plant, and Mr. Webster called me in, and told me that anything that Mr. Milton wanted, to get it out for him, and get it out quick.

Q In connection with what?

A And let anything else go, if it interfered with his work.

Q Did he specify the kind of work that he wanted you to do for Mr. Milton through your department?

A No.

Q Let me ask you, were you at that time at the head, of what department, of the Webster Manufacturing Company?

A The engine department. We built gasoline engines.

Q The machine work?

A We built gasoline engines, yes, sir.

Q Did you have in your department the work of making patterns, and castings?

A No. Only metal patterns.

Q Only what?

A Metal patterns.

Q Did you do the machine work, in your department?

A Oh, yes.

Q Did you ever, through your department, do any work for Mr. Milton?

A Yes; I done all of Mr. Milton's work up to the time that they afterward made a department by itself.

800 Q What kind of work was it that you did for Mr. Milton in your department?

A Well, magneto work. The magneto, the low tension magneto, we called it.

Mr. Williams: Q What is that? I did not hear.

A Magneto work, for low tension magnetos.

Mr. Bulkley: Q Did you know anybody about the Webster—Did you know anybody about Mr. Milton's department, by the name of Abbott Munn?

A Yes, I know him very well.

Q Well, what did he do?

A Mr. Munn really was Mr. Milton's assistant.

Q Did you ever know anybody in and about the magneto work, with Mr. Milton, by the name of Kane?

A I did not remember him. I recognized him this morning, when I was introduced to him.

Q Did you ever do any work for him, in connection with magnetos?

A No.

Q Did you ever do any work for Mr. Munn?

A Yes; that is, Mr. Munn would come to me with instructions that Mr. Milton wanted his work done; and I would get it out for him.

Q Did you ever know of this Mr. Kane, Joe Kane, in connection with this magneto work that was being conducted by Mr. Milton?

A No, I do not.

Mr. Bulkley: That is all.

Cross-Examination by Mr. Williams.

Q When was it you met Milton first?

A I do not remember the exact time. Along about 1906, I think, or 1905; I do not remember.

801 Q How long did you continue to do work in your department, as requested by him?

A Well, up to the time that they moved away.

Q When was that?

A I think it was in 1908, or 1909.

Q That who moved away?

A Well, the magneto department. They moved to Tiffin, Ohio.

Q How?

A They moved down to Tiffin, Ohio. I do not remember the date.

Q Now, as I understand you Mr. Webster, after he introduced Milton to you, put Milton in charge of your department?

A No.

Q That is not the fact?

A No, sir.

Q Well, how was that?

A He simply gave me instructions, if anything that Mr. Milton wanted, I should get it out for him. I still had charge of the department.

Q That is, your department was the manufacture of engines, was it?

A Yes, sir.

Q Now, do you know what other departments there were in that Webster Manufacturing Company's organization?

A Well, there was the foundry, and a pattern shop, and a large machine shop downstairs, that done all their elevating and conveying machinery work; and a sheet metal shop.

Q How many men were there employed in that plant, altogether?

A Altogether in the neighborhood of three hundred.

Q Now, was Milton, as you understood it, put in charge of all those different departments?

A No, sir. Milton did not have charge of any department at that time.

Q Well, then Milton came there as an inventor, as I understand, did he not, to—

A I do not know.

802 Q Well, did you understand from Webster or from Milton that he was going to do some experimental work?

A Yes, sir.

Q And that you were told, as I understand it, then, when ever he wanted any machine work done, for you to give him a man, and do it?

A That is it, exactly.

Q But you continued to run the department, of course?

A Yes, sir.

Q He had nothing to do with the manufacture of the engines?

A No, sir.

Q Well, then, it was simply, then, a matter of convenience, that he did not have enough work on the magneto to run a whole department by itself, and so Webster gave you to understand that whenever Milton wanted a little job done for this experimental work, to turn over the man and the machinery to him?

A Yes, sir.

Q And Munn, you say he was an assistant; did he do machine work himself?

A I think he did, more or less. He worked right along on the magnetos.

Q Well, with his hands?

A Oh, yes.

Q That is, making parts?

A Yes, making parts. He was a machinist.

Q Was he a machinist in your department?

A Not in my department. You see, I was in the gasoline engine department, and the conveyor machinery was an entirely different department, run under a different head. Mr. Munn worked there for a number of years, and was finally taken from that department to work for Mr. Milton.

803 Q Well, you had the lathes, and the milling machines, and the machine tools?

A In the engine department?

Q In the engine department?

A Yes. In the engine department only.

Q And, as I understand it, Munn did not have any machine tools to work with, for the magneto work alone?

A Not at the time he started.

Q And so when he wanted to do machine work he would come into your department?

A Yes.

Q And use your machinery?

A Yes.

Q That was the arrangement, was it?

A That was the understanding.

Q Who was it did most of that work in your department, that is, the actual work? Was it Munn? That is, the work on the magnetos?

A Oh, it was different men. It would depend on what kind of a job it was.

Q Well, when you had another man, you would let him use him, if he could do the work?

A If I did not have another man handy, it was up to me to get somebody to do that work.

Q And part of the work was done by Munn?

A Yes, sir.

Q Who was not directly in your department?

A Not directly under me.

Q You said that there was a separate pattern making department, where all the patterns were made, except possibly some metal patterns?

A Yes, sir.

Q Do I understand that you made metal patterns in your department, in some cases?

A In some cases, yes; where they were busy in the 804 pattern department there,—they had one man there that worked on metal patterns, and when he was too busy I helped him out.

Q You did not in your department make any metal patterns for any of this magneto work, as I understand?

A I could not say. I do not know.

Q Do you know of anyone else besides Milton and Munn, who were engaged in this experimental work, or the development or the manufacture of magnetos, before the magneto work was taken to Tiffin?

A Well, they had two or three men in the engineering department, working on it.

Q Who were they?

A They had one man by the name of Chiville. I think his name was Chiville; some such name.

Q Do you know of anyone else?

A Well, I do not know. There must have been a number of them working on it, because I would get an order through to do so and so, but I never knew who made the drawings; I never paid any attention to that.

Q I suppose you regarded this magneto work as a sort of a nuisance, anyway, in your department, did you not?

A In a way, yes.

Q I think that is all.

A It interfered with my regular work.

Mr. Bulkley: That is all.

Mr. Williams: Are you ready for Mr. Milton now?

Mr. Bulkley: Yes. Mr. Milton, will you take the witness stand now?

JOHN LEWIS MILTON, resumed the stand on behalf of the corporate defendants, and further testified as follows:

Cross-Examination Resumed by Mr. Williams.

Q This four-piece yoke that you referred to in your 805 testimony, how many of those were made?

A One,—or, two.

Q When was that?

A Right at the beginning.

Q Now, Mr. Milton, after this machine like Plaintiff's Exhibit No. 15, had first been tried out, and after it had been submitted to the Harvester Company, and tested and approved by the Harvester Company, what was next done with the machine, insofar as its commercial development is concerned?

A Why, the Harvester Company proceeded to make the castings, all of the iron castings, and electrodes, and everything—

Q And what did the Webster Company do—

A (continuing)—and everything, except the magneto proper, with the yoke, the magneto rotor, and shaft, and the springs, and the studs for supporting the springs. That was all we had to do.

Q Now, what did you have to do with the manufacture of those devices, yourself?

A I personally superintended it, and watched the tests on it, as it came through.

Q When did you do that?

A Daily.

Q How?

A Daily.

Q Well, when? During what time?

A It had been continuous from before that; all during the entire production I kept a very close watch of all that work.

Q Well, when was it you did that work?

A Every day.

Q In what month?

The Court: He wants to know what month and year.

A I will say every month.

Q In 1910, or 1909?

806 A Well, my work started there from 1905,—we started to make my own magnetos in 1906; and it ran on until 1909, when I left there.

Mr. Williams: Q I evidently have not made it clear that I am trying to ask you about the making of the magneto part of the equipment, as represented by this Plaintiff's Exhibit No. 15 (indicating). Now, during what months did you have to do with the manufacture of any part of that equipment?

A Well, this went into the production, this particular model, or substantially this particular model, as soon as the dies were finished.

Q Well, when was that?

A That, according to the letter I turned over yesterday, where I wrote to Mr. Webster that the dies were being finished, was sometime in May, when those dies were finished.

Mr. Bulkley: Q What year, Mr. Milton?

A 1909. And I—

Mr. Williams: Q That is, for the magneto part alone?

A For the magneto part. The rest of the parts did not require any very especial preparation.

Q Now, when did you begin, when was the manufacture of such devices made with those dies first taken up? When did the delivery of the first of those machines occur?

A I could not tell you without looking at my records. I have—

Q Well, have you any records here that would show?

A I think they will show. Shall I look at them?

Q Yes. I would like to learn about that.

A Well, in 1909, according to the report furnished me by the Webster Manufacturing Company, in January we shipped thirteen magnetos (referring to paper) in February 1, March 46, April 83, and in May 231; June, 400. So that shows you about when the new product started to go into the production, or the new magnetos. I dare say those 98 of April were of the earlier type, the larger bracket, of the same type; that is quite possible.

807 Q That is, there was a larger magneto than the one contained in this Exhibit 15, was there, but otherwise substantially identical with it?

A No; I would not say substantially. It was larger. There is a print of it here in evidence.

Q Well, it was like this Exhibit 15, except that it was larger?

A Of the same general type, but it was different in its electrical properties.

Q Now, let us see. You read from what? Some royalty reports to you?

A Yes, sir.

Q For the months of April to July, was it, 1909?

A January, through June, of 1909.

Q Now, what, again, were the numbers delivered or reported during those months?

A January, 13; February, 1; March, 46; April, 83; May, 231—232, I guess; June, 400.

Q And what for July?

A That is on another report, that I do not happen to have here.

Q Can I see these reports that you do have?

A Yes, sir.

(Papers handed to counsel.)

Q Now, how is it that you deduce from the figures shown in these royalty reports the fact that deliveries of this smaller type of magneto, as exemplified in Plaintiff's Exhibit No. 15, commence in May, 1909?

A Because there was a period there where the Harvester Company had practically started taking, and they were the

largest customers at that time, and it may be that those in May were Fairbanks engines, that were equipped with magnetos. Those were all the magnetos that went,—and the Fairbanks people would take lots of twenty-five to fifty at a time. I do not believe we ever shipped them more than 808 a hundred in any single month. So that tells me right away that that is where the Harvester work commenced to be felt.

Q Well, now, these magnetos of the size and kind exemplified in Plaintiff's Exhibit No. 15, were those sold and shipped to the Harvester Company always for use in connection with the unitary plug and bracket and mounting mechanism, as exemplified in Plaintiff's Exhibit No. 15?

A I do not recall them ever having been shipped for any other purpose, to the Harvester Company.

Q And those shipments of that magneto for use by the Harvester Company in connection with that unitary plug and bracket began, as you say, in May, 1909?

A Undoubtedly, from those reports; and from my memory it was about that time.

Q That is your own independent recollection of it?

A Yes, sir.

Q —also?

A Yes, sir.

Q Do these reports which you have here show the number of machines delivered to the Harvester Company during the months prior to January, 1909?

A It does not show them separately. It shows all the magnetos that were sent out. I can show you what went out, and give you the numbers, that went out in 1906, or 1907 and 1908; I am not sure about 1906, on that report; I think that is another report.

Q Now, this letter of May 10, 1909, to which your attention is called during your direct examination, contains these sentences:

'The inventory was a serious interruption, and since then we have been very busy attending to the Harvester Company's demands; they have gotten intensely impatient, telephoning several times a day, as well as telegraphing us from Milwaukee. This has all been supplemented by 809 many letters, so you can readily see why we have concentrated our attention to this live business';
and as I understand your direct testimony, the live business

referred to in that letter is the live business of supplying, shipping this magneto, as exemplified in Plaintiff's Exhibit No. 15, for use by the Harvester Company, in connection with the unitary plug and bracket, as they are exemplified in the same exhibit?

A That is correct.

Q That is correct?

A Yes.

Q Now, Mr. Milton, you have been present all during the trial of this case, have you not?

A With the exception of a very short period.

Q You have seen letters that were addressed by Mr. Waterman, and the letters written by him, have you not?

A I have heard them read.

Q Do you remember a letter from Waterman, that Waterman wrote, dated June 11, 1909, in which he said in substance that the Harvester Company had only then for the first time completed its tests, on the very first of these devices, like Plaintiff's Exhibit No. 15, which had been delivered to them at Milwaukee?

A I do not remember the exact date of that. I remember the letter having been read, where he stated the test had been completed.

Mr. Williams: Will you get that letter, the letter of about June 11, 1909?

Q When was it that the Harvester Company first did O. K. the first sample of this apparatus like Plaintiff's Exhibit No. 15?

A Officially, I do not know.

Q Look at this letter, marked Plaintiff's Exhibit No. 14, and state whether you have seen that before, at or about its date (showing letter to witness).

A I remember the substance of this letter, but I do not remember the letter itself, or the time when it came.

810 Q When did the substance of that letter first come to your attention?

A I cannot say.

Q Well, was it earlier than the date of the letter, which is June 11, 1909?

A I cannot say when it was.

Q When was it that the Harvester Company first approved, as a result of its tests, the equipment such as is exemplified in that Plaintiff's Exhibit No. 15?

A We regarded it as having been approved when Mr. Kane, Mr. Maurice Kane, and Mr. Cavanaugh and Mr. Stewart came there to the plant and looked it over. We regarded it as being approved at that time.

Q That is, they saw it for how long? An hour?

A Oh, hardly that long. They were there, I should judge, about an hour and a half, but they did not see it all the while; they were looking around the plant.

Q Stewart was the patent attorney?

A Yes, sir.

Q And Kane, Maurice Kane, was what?

A In charge of the experimental departments of the International Harvester Company.

Q Was he the man who passed on gas engines, or equipment for gas engines, as manufactured by the Harvester Company?

A It had to finally get his O. K., as I understood it; and Mr. Cavanaugh, who was there, was the active man. Mr. Cavanaugh had championed this product, this experimental work, and he was the active head; and his word went a long ways on—

Q What was his position with the Harvester Company?

A He was direct assistant to Mr. Maurice Kane.

Q Located here in Chicago?

A Located at the Harvester Building, in Chicago.

Q Then these people at Milwaukee, Waterman and
811 so on, they they had nothing to do with the approval or acceptance or decision?

A I do not say that. I say we regarded it as having been approved when it passed them, or we got their oral approval of it.

Q When was it that the Harvester Company first placed an order for equipment involving a magneto like this Plaintiff's Exhibit No. 15?

A That I do not know.

Q What?

A That I do not know.

Q Haven't you any records that will verify that?

A The only thing that I have got here is those reports that I showed you.

Q Royalty reports?

A Yes, sir.

Q Made from the Webster Company to you?

A Yes, sir.

Q Now, let me call your attention to this letter of June 11, 1909, written from Waterman, to the Experimental Department of the Harvester Company, in Chicago, and in which he says the following things,—in which he says this:

‘The improved Milton magneto recently received, attached permanently to the igniter plug has for sometime been in operation on a six-horse power engine. It is different in all of its parts from the magnetos we have regularly been receiving from the Webster Manufacturing Company, and these alterations submitted overcome reasonably well important objections raised by us in our letter to you of the 15th of March.’ ‘The new magneto complete weighs about eighteen pounds, as against about thirty-two pounds for the old one; the magnets are shorter; the rotor is half an inch less in diameter; the springs are fastened to posts set in the pole piece, and the pole in the center brass supporting the magneto proper is half an inch smaller in diameter. The

812 magneto as now presented seems to work well, and except for the fact apparatus of this nature is rather delicate when continuously exposed to dust and moisture, we see no reason why it should not prove reasonably satisfactory, electrically and mechanically,’ ‘because we already have seven different designs of igniter plugs for make and break engines, not including those of the new side shaft engine; if we are to purchase these new magnetos from the Webster Company, we should not have the igniter plug included as a part of their product.’

Now, does that refresh your recollection in any way as to whether the Harvester Company had even ordered any equipments of this kind, as exemplified in Plaintiff’s Exhibit No. 15, on June 11, 1909?

A I remember when that feature came up. Mr. Waterman, as he stated, when he was here on the stand, that he wanted to buy the magnetos, and for them to make the brackets so that they would not have to carry so many magnetos in stock, and tie up so much money and materials, that would not be used immediately. But that does not change my impression that they ordered a number of these for tests. Now, the tests, as I recall it, they wanted to run a number of different tests on different sizes of engines, and they wanted to run some endurance tests; I do not know whether those tests were made up by the Harvester Company, in Milwaukee, or

whether they put them out to some of their agents, to try them out in the field.

Q When was all that? When did that occur?

A I say I cannot state. I say it was my impression that came immediately,—that they wanted to get a number of these things right away.

Q That, you say, was before the completion of this test on the first one by Waterman, of Milwaukee?

A I do not know what the completion of that test meant. I do not know.

813 Q How do you mean you do not know?

A I do not know what his tests were. I do not—

Q What?

A I do not know what they were. I do not know—

Q Well, wasn't that the first test that was ever made by them on one of these equipments?

A I cannot say for that.

Q Well, when did they first make the test?

A I do not know.

Q On one of these equipments? What?

A I do not know. I know that—

Q Did they ever make any test of them, so far as you know?

A I know we set up a magneto on one of the brackets, to go on one of their engines, and just what—

Q You sent that up by Kane, I understand?

A Yes, that went up by Joe Kane.

Mr. Williams: Q Now, what they did up there you do not know?

A After that magneto was left there?

Q Yes.

A I do not know.

Q You never heard what the result of it being left there was?

A I could not say at this date.

Q You do not know whether they approved it or did not approve it?

A I know that the magneto was approved, and I know we started making them—

Q When was it approved?

A I do not know when it was approved.

Mr. Williams: Q Have you anything in any of your papers, or in your mind or in your recollection, that would lead you to say that that was approved before June 11, 1909?

814 A I would say that we may have gotten informal approval of that—

Q From whom?

A I could not say from whom, but probably from this man Andrews, who was up there; he may have reported to us—

Q Well, you are speculating.

A I know.

Q Are you not?

A I know we did get reports from him before the thing went through officially.

Q What kind of reports? Written?

A Oral reports.

Q To whom?

A To whoever happened to be calling up there.

Q You were not there?

A I was not there on this, but I had been there before.

Q You have answered the question. Now, this letter of Waterman's goes on to say, then, 'Because this new magneto certainly is an improvement over the older one, we recommend that our present order of these older magnetos be completed and delivered to us at a uniform rate per week, before the 15th of August.' Now, do you know what he referred to there as the older magnetos? Can you describe those?

A Let me read that, will you? I was thinking of another phase of this.

(Paper shown witness.)

Q Have you read it

A No.

Q How?

A I have not quite finished. I remember his recommendation coming through.

Q Whose?

A This.

815 Q Waterman's?

A Yes; and I remember that—

Q In this letter?

A And I remember we made an effort to have that advanced.

Q What advanced?

A Their requirements advanced, because we did not want

to furnish any of the old troublesome magnetos, and I do not believe we did.

Q Now let me go on with what I was reading from this Waterman letter:

'We recommend that our present order of these older magnetos be completed and delivered to us at a uniform rate per week before the 15th of August; that one dozen of these new type magnetos be delivered to us immediately.'

Now, does that refresh your recollection as to when the order was received for the dozen that you spoke of as being made to go out into the field for tests around in various places?

A I do not know when that order came in.

Q Was it before the 11th of June, 1909?

A I could not say whether it was before or afterward, but I think it was before that.

Q You do?

A I think so.

Q When were these dozen delivered?

A I do not know.

Q Before or after the 11th of June?

A I do not know.

Q Was that a written order?

A I do not know. We did a great many things informally.

Q Never mind. You do not answer what I asked you about.

A Well, I want to explain.

Q I am not asking you to explain. I am asking you 816 the fact. Now, after saying that, 'one dozen of these be delivered to us immediately, regular delivery of these new ones, inclosing only magnetos with coils, the rotor trip finger, and springs for the trip finger, to begin on the 15th of August, at the rate of about fifty per week.'

Now, did the delivery of these equipments or magnetos exemplified in Plaintiff's Exhibit No. 15 begin before the 15th of August?

A I am very sure they did.

Q In what quantities?

A I do not know. I know we were delivering them to them regularly before I went to Europe.

Q And when did you go to Europe?

A I went to Europe in August; and I know that when

that came in I wanted to stop that old magneto that was giving trouble.

Q Never mind what you wanted to do.

A Well, I wanted to—

Q You say they were shipped in quantities, commercially, before you went to Europe?

A Yes, that is my impression of it.

Q On written orders, or oral orders?

A I could not say.

Q Have you got any written record of any kind, or any written memorandum made contemporaneously, that would verify your recollection, or confirm it upon that point?

A None that I am aware of.

Q This letter of Mr. Waterman's says, 'If this program can be followed we will begin to make use of these new magnetos on the first of September.' Did the Harvester Company begin to make use of them before the first of September?

A I am sure they did.

Q And you are sure that those shipments began in May—before May, 1909?

817 A I know that I have a letter here where I stated about the Harvester requirements.

Q Let us see that.

A You have it there.

Q Which letter is that?

A I think it is that you have in your hand now. It is Defendants' Exhibit No. 14.

Q This May 10th letter (indicating)?

A Yes; and I think that those were the first sample magnetos, that they wanted; that is my remembrance of it.

Q Now, what is there in that letter upon which you base that statement?

A 'The inventory was a serious interruption, and since then we have been very busy attending to the Harvester demands. They have gotten intensely impatient, telephoned several times a day, as well as telegraphing us from Milwaukee. This has all been supplemented by many letters, so you can readily see why we have concentrated our attention on this live business.'

Q Now, it is because you find the words 'live business' there, that you base your statement that deliveries of these machines, like Plaintiff's Exhibit No. 15, had commenced before the first of May, is it?

A I base my statement on the fact that I knew that I was very glad to get away from having to furnish the old type of magneto, and as soon as this,—the chance of sending the new one, came, I bent every effort to get this business lined up, which I term here as 'live business.' It may have been only the samples they were impatient for. I cannot possibly imagine the Harvester Company telephoning or telegraphing us for the old type of magnetos, which had been such a trouble maker.

Q Now, this letter of Waterman's dated June 11, 1909, says: 'We recommend that our present order of'—it reads here—'present order of these older magnetos' or 'for 818 these older magnetos, be completed and delivered to us at a uniform rate per week before the 15th of August.' Now, what is the fact? Did you continue to make deliveries of those older type magnetos up until the 15th of August, 1909?

A To give you the absolute, definite fact, is beyond me at this time, but it is my impression that we tried to substitute the new for the old.

Q Never mind about that. I am asking you whether you did make the deliveries of the older ones.

A I cannot tell you.

Q You do not know?

A No, sir. I think we did not.

Q You still insist, then, that the live business to which you referred in this letter of May 10, 1909, when you wrote Mr. Webster, was business in these newer equipments, such as Plaintiff's Exhibit No. 15, rather than the older type, to which Mr. Waterman refers in his letter of June 11, 1909, do you?

A I believe it is.

Q Well your recollection is based upon what, or your belief is based upon what? Upon the language of the letter, as I understood you?

A The language of the letter, and my definite remembrance of the trouble that the old ones were giving, and the fact that it appeared immediately preceding there that we shipped so very very few to anybody, which of course would include the Harvester Company.

Q Now, let us see. In these royalty reports to you you said that in April, 1909, how many magnetos, all told, were sold or shipped by the Webster Company?

(Papers handed to witness.)

A Eighty-three.

Q Now, those in April were of which type? The older type or the type like, for use in, Plaintiff's Exhibit No. 15?

A They may have been the Fairbanks' type. I do not know.

819 Q You mean that they may not have gone to the Harvester Company, at all?

A They may not have gone to the Harvester Company, at all, because—

Q Now, how about May? How many?

A In May there were 230.

Q To whom were they shipped?

A They are billed at \$8; and that was the price of the Harvester Company machine.

Q For which? The older one, or the one like Plaintiff's Exhibit No. 15?

A I think it was,—I think that each one of them carried the same price; so I would not be able to identify it by that.

Q Now, how many are there there?

A 230.

Q Those 230, as I understand you now, were of the type exemplified by Plaintiff's Exhibit No. 15, were they?

A I will not say so. I do not know.

Q Well, what were they?

A I do not know, because I—

Q Well, were they the older ones, or were they the new ones like Plaintiff's Exhibit No. 15?

A Again, these may have been Fairbanks' machines, because here in April—

Q They may have been Fairbanks', you say?

A Yes.

Q And may not have been Harvester, at all?

A There may have been some Harvester. There may have been a mixing. I cannot tell, because I see here in April—

Q You have answered all my questions. Now, answer this one: Have you got anything else that would enable you to tell?

A Not that I am aware of.

Q Now, look at this letter of May 26th, 1909, from 820 H. A. Waterman, by Bradley, to Cavanaugh, of the Harvester Company; that is Plaintiff's Exhibit No. 9. Did you ever see that, at about its date?

(Exhibit handed to witness.)

A I do not remember of seeing this, or any other letter from Mr. Bradley. I do not recognize the signature.

Q Did the substance of this letter of May 26th come to your attention, this letter which reads:

"Replying to your letter of May 17th, as outlined in the New Works Committee Report No. 176, Mr. Waterman has arranged to run the Milton magneto, which Mr. Kane left at this works, for a period of two or three weeks; at completion of this test we will make report covering the magnetos, to date."

Did the substance of that come to your attention on or about May 26, 1909?

A It is my remembrance that the formal report was asked for from the Milwaukee works, or the Harvester Company down here.

Q Well, I am asking you whether the substance of this letter came to your attention on or about May 26th, 1909?

A Well, that letter itself I do not recall.

Q You say that it was before May 26th, 1909, that you began shipping commercially these magnetos, for use in this Plaintiff's Exhibit No. 15, do you?

A I do not say commercially. I say—

Q Well, in quantities?

A In quantities,—I do not know; but this letter tells me that we were shipping something to them, and I am pretty sure it was that type, for the reasons explained.

Q Because the letter says, 'Live business'?

A Absolutely.

Q 'Live business' could not have meant the several hundred—

A Of the square type.

821 Q Of the older type?

A Not when we were so anxious to get away from it.

Q What other 'live business' did the Company have in magnetos at that time, aside from the Harvester and the Fairbanks' equipments?

A The Harvester, and Fairbanks, and occasionally we were selling magnetos to people to put on machines that were already out. Those were the type that were driven with a sprocket and chain.

Q That is, an individual one here and there, to individual purchasers?

A Throughout the Northwest. I did have a very long re-

port on that, and I think I still have that, but I haven't it here with me.

Q Now, the only business you had then were those sporadic sales to individuals, some to Fairbanks, and some to the Harvester, which, from your royalty reports you cannot distinguish from the other, and that is the whole of the live business that the Company had in magnetos, at that time?

A I don't remember any other.

Q Now, what type of machine paid the royalties that you refer to there in your royalty reports, in February, 1909? What kind of machine was that? The older one, or the kind represented by Plaintiff's Exhibit No. 15?

A February, one shipped.

Q One machine sold?

A That was billed at fourteen dollars.

Q Now, what kind was that, or was it the Plaintiff's Exhibit No. 15 type?

A It could not have been that.

Q It could not have been? Well, you base that upon your recollection, or upon what you find in the records?

A Both.

Q Now, in March, how many were shipped, altogether?
822 A There were 46 shipped.

Q 46 magnetos shipped during that month. Now, what type were they? Were they Plaintiff's Exhibit No. 15 type, or the older type, which preceded that?

A These were billed at \$14.50. It was an older type.

Q Now, April, how many were shipped altogether during that month?

A 83.

Q What were they? Of the older type, or a new type like Plaintiff's Exhibit No. 15?

A I do not believe that there were any of them of the new type, or could have been.

Q How?

A I do not believe any of them could have been of the new type?

Q In April?

A No, sir.

Q And how many were there in April, altogether?

A Eighty-three.

Q Now, how many in May, altogether?

A 231—232.

Q And those you say are of the new type, like this Plaintiff's Exhibit No. 15?

A No, I do not say that. You asked me that question.

Q Well, what are they?

A You asked me that question before, and I told you I could not tell what they were.

Q Now, go to June; how many then?

A In June there were 400.

Q Even?

A No. There is another figure here. 402.

Q Now, which were they? The older type, or the new 823 type like Plaintiff's Exhibit No. 15?

A Two of them were billed at \$10.50 a piece. That could not have been possibly,—at least I do not think it could have been the new type. And of the old type, I have the figure of \$8, which appeared before and after the time that this was developed; and I cannot tell you from this record, or I cannot tell you from my memory.

Q Then you do not know whether it was the old type or the new?

A I cannot tell you.

Q How about July?

A I haven't it here.

Q How about August?

A I haven't anything after June.

Q That covers everything you have covering the time up until you left, in August, doesn't it?

A No, I have other records, but I do not happen to have them in my hands.

Q Where are they?

A I think I have them here in Chicago.

Q Here in your case?

A I do not believe they are here.

Q Will you look and see?

A In the case?

Q Yes.

(The witness left the stand and produced some papers.)

Q What papers did you find there, Mr. Milton?

A I have made a thorough search, and I do not find the other papers. The papers that I took out were some other papers, that I thought might have some bearing on the case here.

Q What are they?

A May I see them?

A Why, they are simply letters addressed to— Part of the correspondence I had with T. K. Webster, Jr., immediately after leaving for Europe.

824 (The witness handed the papers to counsel.)

Q This first letter that you hand me here is a letter reading, on the letterhead of the Webster Electric Company, Tiffin, Ohio. (Reading:)

'Tiffin, Ohio, August 31, 1909.' Addressed to J. L. Milton; signed 'Webster Electric Company by Towner.' Who was Towner, by the way?

A Towner K. Webster, Jr.

Q Connected with the Webster Electric Company?

A Yes, sir.

Q In which he says, among other things:

'Things are going very nicely, and we are beginning to turn out a good many different parts. I hope to be able to ship some magnetos the last of this week.'

Does it not?

A I have not read it very recently, but that is my remembrance of it.

Q That is a letter dated August 31, 1909?

A Yes, sir.

Q These other papers that you pulled out here have to do with in 1911, do they not (indicating)?

A Yes. I did not read these over before I pulled them out, but I did not want to forget them; that is why I picked them out.

Q So that you do not know what the shipments were, nor what kind of machines were shipped during July or August, 1909?

A No, but I believe, I have the records in Chicago here.

Q Have you got more papers somewhere else here?

A Yes, but not—

Q Where are they?

A They are at the hotel.

Q Have you got a lot of them?

A Quite a lot of them.

Q What?

A Quite a lot of them.

825 Q How many? A hundred or two hundred?

A More than that.

Q Now, Mr. Milton, how does it happen that after this machine was sent to the Harvester Company, to be tested, this machine as exemplified in Plaintiff's Exhibit No. 15, that you

do not know anything about how long they ran that test, anything about when the test was finished, or when they approved the machine, or when they ordered machines,—that you yourself never went to Milwaukee in connection with that test, do not know what they did up there, do not know anything about it? Now, how does that happen?

A Well, I would not say I did not know anything about it. I was getting reports, and keeping in touch with the situation, with the Harvester—

Q I think you said a little while ago you did not get reports?

A Well, I was getting oral reports.

Q From whom?

A Why, from Kane. He went up there, and—

Q Joe Kane?

A Yes. And I was getting reports through Mr. Webster, and we were in constant touch with the Harvester Company. What those reports were, I do not know, but my—

Q Then let me ask you again: The first machine was sent to Milwaukee to be tested, was it not?

A Yes.

Q Now, when was it sent there?

A It was sent there very shortly after—

Q No. What is the date, the month?

A Well, now, I am fixing it. Very shortly, after when Mr. Kane, Sr., Mr. Cavanaugh, and Mr. Stewart were at the Webster Company, which I think was sometime in, early, in May.

Q So that it was early in May that that machine was sent there for test, was it?

A That is my remembrance of it.

Q Now, after that you did not see the machine there?
826 You did not talk with any of the Harvester people about it yourself? You did not see any written reports from anyone about it, did you?

A I do not recall those written reports. I may have seen them, and I may have been over to the Harvester Company and talked to Mr. Cavanaugh.

Q Now, answer the question?

Mr. Bulkley: Let him make his answer.

Mr. Williams: He has answered it.

Mr. Bulkley: No, he has not.

Mr. Williams: He said he did not know.

Q And you do not know when they finished their tests there in Milwaukee, do you?

A They made tests, and they were continuing to test the thing for a long period. I do not know what you would call a finished test.

Q Weren't you concerned or interested?

A Absolutely, all the while, and am yet.

Q Do you not know when they finally approved the machine, to be used by the Harvester Company, do you?

A I took it for granted that the thing was approved, when—

Q I am not asking you what you took for granted. I am asking you whether you know when they finally approved it.

A Mr. Cavanaugh and Mr. Kane and Mr. Stewart were there, and gave an approval at that time; that was an oral approval; and that is when I date back to the first approval we got of them; and then there were different phases of that.

Q That approval was then? Early in May, you say?

A That is my remembrance of it.

Q That was the approval by Maurice Kane and Stewart and Cavanaugh?

A Exactly.

Q Did they place any order for anything, any machines?

A No order.

827 Q Who did place the order finally?

A I do not know.

Q Weren't you concerned as to whether you got an order?

A Intensely so, yes, sir.

Q Have you got anything to show anything about the receipt of that order?

A Nothing.

Q Or do you know anything about when it came?

A Nothing.

Q Or how or where?

A I have a very strong remembrance that there was very considerable pressure put on me to get out machines, as soon as this thing was disclosed.

Q By whom?

A By the Harvester people, generally. I think—

Q That was early in May they put that pressure on you, was it?

A I would say immediately following that. I won't say it was early in May, but I think, if my other assumption was right, this is right, that it was early in May.

Q Now, you say that Maurice Kane and Cavanaugh and Stewart saw the first of these machines like Plaintiff's Exhibit No. 15, run here in Chicago early in May, don't you?

A I say according to my best knowledge—

Q Yes.

A —it was about that time.

Q Yes. Early in May. Now, that is the first one of that type that any of the Harvester people had ever seen, is it not?

A That is the first time that any of us saw it, was right about that immediate time.

Q Now, how early in May was it that they saw that?

A I think it was so early in May that it may have been the first day; it may have been even the latter part of 828 April, because we worked very continuously on it; I do not think it took us more than two days or two weeks to get the thing out.

Q From what? After that date?

A After the date as we have set up here as when we started to make our drawings.

Q When was that?

A April 14th. April 14th, yes.

Q That is the date, is it, when the drawings were started?

A That is the date we have set up here.

Q Well, is it the date? I do not care about what you have set up here.

A I know,—it is the date, as near as we can establish it.

Q Who are "we"?

A All of us.

Q Who?

A You, and myself.

Q You are basing your testimony upon what I am establishing, are you?

A What we are all establishing, by the letters. I will review them, if you wish me to.

Q All right.

A The first letter of Mr. Webster, of April 16, 1909, and the time,—that letter was written immediately following my request to him to get an engine for this purpose. That is my anchor on this date.

Q That is what you anchor your testimony to?

A Yes.

Q And by the tenth of May, notwithstanding the fact that it was early in May that the first one, sample of one of these machines was ever shown to any of the Harvester people at all, by the tenth of May you wrote Mr. Webster that you had been so overwhelmed getting out machines, of this new "live business" type, that you could not attend to something else?

That is your testimony now, is it not?

829 A My testimony is that the interruption of the inventory, and the—

Q No, but the live business, the first—

A (Continuing)—demands of the Harvester Company,—that may have been only five machines; they were new, and special, and we did not have complete tools for it, and it was some job to get out even one of them.

Q And it was that "live business," that is, the getting out of these five, that the Harvester Company was telephoning and telegraphing and writing letters about, was it?

A That is my knowledge of it today.

Q Have you got a single one of those letters or telegrams?

A Not one.

Q Have you tried to locate one of them?

A I have not gone out and looked for those, but I have been through my files at that date, and did not find one.

Q Have you talked with any of the representatives of the Harvester Company, in preparing to give your testimony here, Mr. Lord, or Mr. Kimbark, or any of the people connected with the Harvester Company?

A The only person connected with the Harvester Company that I have talked to was Mr. Merwin, with reference to this subject.

Q Have you made any effort at all to get a single one of the letters or telegrams referred to in your letter of May 10, which you now say were written in the effort to procure the shipment of these new devices, like Plaintiff's Exhibit No. 15?

A Those were company records, and they are evidently in the Webster files, and therefore I made no effort to try and find them; I do not suppose it would have done me any good if I had.

Q Well, why not?

830 A Because, the evidence and the knowledge of this thing, that has been used, has been used as the Webster Company's representatives wanted to use it.

Q And that is why you think these things would be concealed, I suppose?

A I did not say that.

Q Well, at least they would not be available?

A Feeling that way about it, I did not ask for them.

Q Let me call your attention to this letter of May 6, 1909, from Mr. Edward H. Kimbark, of the Harvester Company, to Mr. A. E. Mayer, Division Manager, dated May 6, 1909, in which he says:

'Referring to letter of the Webster Manufacturing Company, of April 29, Mr. Kane looked over this new method of attachment on the fourth, and it looks to be an improvement over that previously used.'

Would that date, May 4, 1909, be consistent with your recollection as to the date at which Stewart and Kane and Cavanaugh came and saw the machines?

A Quite consistent. The early part of May, 1909.

Q And by the 10th of May after that you were just seething with these orders for "live business," as you now testify?

A The production of one may have made us seeth.

Q Now, in this letter of May 10th, your letter of May 10th to Mr. Webster, you say that you have ordered dies for the smaller type of low tension magneto?

A May?

Q So that any business that you may have had before the 10th of May was not on manufactured magnetos, was it? That was hand made samples?

A No, we had a set of dies of a machine larger than this, which is shown in the blue prints that I had here in connection with the link motion machines, and then we made some by hand, feeling out the size, that is, they were being
831 worked out by hand, to find out whether our calculations were right, before we would go to the expense of making the large dies to produce those; and that having been determined, the dies were ordered as stated there.

Q Now, in this letter of yours dated May 10, 1909, you say that the smaller type magneto for jump spark work has been necessarily sidetracked, for the various interruptions. Now, what were those interruptions?

A Well, they are in the letter; I referred to the inventory.

Q Anything else? Any other interruption?

A That is at least one precedent there in the letter. I would have to look that over again, and see if there is any other.

Q The letter reads, 'that smaller type magneto.' That was the high tension magneto, of course, was it not?

A Yes— Which is that?

Q The smaller type magneto, for jump sparkwork.

A Yes.

Q 'Has been necessarily sidetracked, for the various interruptions'?

A Yes.

Q That was the high tension machine?

A That was the high tension— No, it was a jump spark machine, as distinguished from a high tension machine, as we understand it.

Q As distinguished from high tension?

A Yes.

Q I thought the jump spark is high tension.

A A jump spark machine, as we made them, were low tension machines, in which the low tension current was delivered to a transforming coil. That distinguishes it from a machine of a direct high tension.

Q At any rate, this small magneto for jump spark work, that was something for the Cadillac and automobile trade, was it not?

A It may not be, jump spark work; I would not be specific on that.

832 Q Now, that you say was necessarily sidetracked for the various interruptions. Then the letter says, 'Just prior to taking our inventory we had to concentrate our attention on getting the equipment ready for Mr. Chiville. Now, the inventory was taken when? May 1st, was it not?

A According to these letters, yes, sir.

Q And how long did that take?

A I do not know.

Q Well, a day or two or three or four?

A I would say approximately from two to five days.

Q That was following the first of May?

A I rather think it was two or three days.

Q Then the letter goes on, 'had to concentrate our attention on getting the equipment ready for Mr. Chiville.' That was some automobile high tension equipment?

A It was.

Q And that was not the high tension equipment of the smaller size, was it, that you got ready for shipment?

A I could not tell you that at this particular time.

Q Then the letter says, 'The inventory was a serious interruption, and since then we have been very busy attending to the Harvester Company's demands.' That was one of the interruptions, was it?

A I would hardly regard that as an interruption.

Q Well, doesn't your letter call it that? That is the point of my question.

A I see that is the point of your question.

Q Well, haven't you detailed it there as one of the interruptions, interruptions to the thing that you were interested in,—getting out this small high tension machine?

A It is possible to put that construction on the letter, if you look at it in that way.

833 Q Isn't it what you—I do not care about the possible construction. Isn't it what you referred to as one of the interruptions in that very work, when you wrote the letter?

A I say the inventory was the interruption, the main interruption, but not the interruption of the regular work—

Mr Bulkley: Now, your Honor, I submit that the witness should be permitted by counsel to answer.

A I would like to have a chance—

The Court: Yes. He should have a chance to answer the question.

Mr. Williams: Well, take your time, and answer it.

A If you regard the ignition, the high tension ignition program—

Mr. Williams: Now, won't you read him the question?

A I have got it.

Mr. Williams: Well, I would like to hear it, myself.

(Pending question read.)

Q Did you get the question?

A Yes.

Q That is, whether this, where you say 'the inventory was a serious interruption, and since then we have been very busy, attending to the Harvester Company's demands,' isn't that one of the things which you detailed in that letter as an interruption, with respect to the getting out of this small high tension machine, and didn't you so mean it,—as an interruption, when you wrote that letter?

A Is the question finished?

Q Yes.

A Mr. Webster and I always differed—

Q Now, I will ask you to answer the question.

A I am answering your question, but I have got to answer it in my way.

Q No, you have not.

834 A I cannot say yes or no to it. I will not say yes or no; I cannot do it.

The Court: Go on.

Mr. Williams: All right. Then explain it.

A Mr. Webster and I always differed on the program of running that, of which machine we should give preference to, the high tension or the low tension. Mr. Webster had written and asked me—

Mr. Williams: Now, I submit,—I will give you time, but I submit, your Honor, that the question is whether in writing this letter he did not detail this Harvester work as one of the interruptions referred to in the same letter. Now, I am willing he should answer that question.

A Your Honor, I would like to answer it.

The Court: I think he should be allowed to answer it.

A And then if it is not right, you can strike it out, and I will make another effort at it.

The Court: Go on, and answer it in your own way.

A Mr. Webster's idea,—when Mr. Webster wrote me he wrote me on this high tension work, and answering him from the state of mind or to communicate to his mind the question, as presented to him, I assumed that the program we were talking on was the high tension work; so, starting with the high tension work there was one interruption, as that, being the program, in itself,—the inventory; then next was the low tension work, that I put ahead of that myself; so these were interruptions, as viewed from Mr. Webster's standpoint.

Mr. Williams: Now, let us see. This letter of yours of May 10, 1909, was written in answer, was it not, to two letters of May 8, 1909, from Mr. Webster to you (indicating).

A Two letters of May 8th.

Q And in your letter you were attempting to, as you
835 say, adopt Mr. Webster's viewpoint, and explain the reasons for the delay in the production of the small high tension machine, were you not?

A Yes.

Q Now, the letter, one of the letters, Defendants' Exhibit No. 13, from Mr. Webster to you, dated May 8, 1909, and which you were answering there in your letter of May 10th,

1909, says, "Regarding the magneto, we went out yesterday and gave the car another trial." That, as I understand, was high tension magneto?

A The Maxwell-Briscoe car.

Q The letter goes on: 'The car was not equipped with a speedometer, and that took some time'; and, a little later, 'The magneto behaves handsomely, and up to the present time everybody is well pleased with it.' All of that letter refers, does it no,— This is Defendants' Exhibit No. 13—to the high tension magneto?

(Letter handed to witness)

A I judge this is an exact copy of the original. This is dealing entirely with the high tension proposition.

Q Now, Mr. Webster's other letter of May 8, 1909, to you, which you are answering also in your letter of May 10 as you say, this one being Defendant's Exhibit 12, reads:

'I wish you would advise me just how you are getting on with the smaller type of magneto, and also if you have done anything further in developing the coil.'

What do you say now as to whether that inquiry referred to a high tension or low tension magneto?

A Let me see it, please.

Mr. Williams: Have you got your original exhibit, Defendant's Exhibit 12? This is my copy of it.

Mr. Sturtevant: They were all turned over to Mr. Frank this morning and they are on the corner of the table.

836 The Witness: This letter was written by Mr. Webster when he was there at New York working with the Maxwell-Briscoe people in connection with the jump spark magneto, and I believe both these letters refer entirely to the jump spark magneto?

Mr Williams: Q Well, the high tension?

A The smaller type; they made smaller types of magneto.

Q In testifying yesterday you said that this letter of May 8 1909 Defendant's Exhibit No. 12—(Interruption).

Q This letter of April 16, 1909, from T. K. Webster to you, Defendant's Exhibit 4, that is the one to which you anchor your recollection, as you have said?

A That is the one that I anchor my recollection to, of the date—

Q Well, you have answered the question. Now, this letter of April 16, 1909, says

'Please write me at New York, 88 Reade Street, how the small size magneto comes on, if you get a good spark.'

Now, what was that, low tension or high tension?

A As just stated, we were developing a—

Q Well, which was it?

A Well, I have to answer it—

Q You can answer yes or no.

A No, I could not.

Q Then you needn't answer it.

The Court: Let him answer yes or no to your question so he will—

Mr. Williams: Q Was it low tension referred to in that letter?

A My interpretation of that letter—

Q You can answer that yes or no, can't you?

A It is my interpretation of that letter that it is low tension because it refers to the low tension above. I would suggest that if you want it answered positively to get Mr. Webster; it is his letter. It is my interpretation of that 837 letter that it is low tension, because it is so stated; it is upon that subject.

Q And it is because you so interpret it that you anchor your recollection to it?

A No, indeed. It is the fact that he got that engine from Mr. Tyson, the one I asked for; the opening statement of the letter—

Q The opening statement of the letter, the inquiry as to how the small sized magneto comes on, that you do not use in anchoring your testimony?

A No, not at all.

Q This letter of April 16, 1909, from Mr. Webster to you is dated Union League Club, Chicago, is it not?

A Yes.

Q And received by you in Chicago out at the factory?

A In due course, yes; the next day, I fancy.

Q Did you make any written answer to this letter of Mr. Webster's dated April 16, 1909.

A I have no copy of it and I don't remember of having done it.

Q Have you looked through your papers to see if you can find any answer or any copy of any answer?

A I didn't look for that particular paper but I went through looking for everything that had a bearing on this subject.

Q Did you find any letter which was an answer to that letter?

A As just stated—

Q Or a copy of it?

A As just stated I did not.

Q So far as you know, you never made any answer to that until that inquiry of April 16 by Webster was supplemented by his letter inquiries of May 8, 1909, and which letters were then answered by you under date of May 10, 1909; that is the sequence of the interference as you now say, is it?

A No; there is another letter in between there.

Q Is that in evidence here?

A Yes. At least one more letter from Mr. Webster written to me from Hotel Seville regarding the Fairbanks proposition, on on Hotel Seville stationery, a long-hand letter. I think it is the exhibit following this, number 5.

Q Do you say, as I understand it, that you devoted yourself to the manufacture, the commercial manufacture and production, of these machines exemplified by Plaintiff's Exhibit No. 15, before you went to Europe in August, 1909? Did you?

A Do you say I confined myself to that?

The Court: 'Devoted' yourself.

Mr. Williams: Q Devoted yourself to the commercial manufacture of those machines—

A Yes.

Q Did you spend time upon that work?

A Yes, I did.

Q When was it you sailed for Europe?

A About the third week in August of 1909 on this trip.

Q And before sailing you had some dies made down East somewhere?

A Yes.

Q Where did you have those made?

A At the V. & O. Press Company, Brooklyn.

Q Did you have anything to do with the ordering or making of those dies?

A I had something to do with the making of them. I supplied—

Q How did you handle that?

A I supplied instructions on it.

Q How?

A I don't remember the details of it. I know that—

Q Orally or by letter?

A I did it orally—I mean, did it by letter or by personal transmission to Mr. Teagle or Mr. Alexander, I don't recall which. I haven't looked up anything to refresh my memory on that. I know I had an active hand in it.

Q Did you go there to the V & O. place of business before sailing?

A I did.

Q How long were you there?

A About an hour and a half or two hours.

Q Were the dies ready?

A It is my remembrance that they were, and they had samples.

839 Q And how long before sailing for Europe was it that you stopped work here in Chicago for the Webster Manufacturing Co.

A I worked for the Webster Company up to about the middle of August.

Q You spoke of a Cadillac car that you got; as I recall it, you said in December or January, 1909.

A Yes.

Q Whose car was that?

A I paid for it. It was mine.

Q Was it a nice car?

A Well, it was a Cadillac.

The Court: He says it was one of the famous models, a four.

The Witness: Oh, yes, it was a four. It was one of the first, one of the very first cars; I think it was No. 257 of this first Cadillac famous—or famous Cadillac thirty. Any they were selling them at a very low price and supposed to be a very high grade car.

Q Had you owned an automobile before that?

A I had not.

Q This was the first automobile you ever had?

A Yes.

Q And it was a dandy, wasn't it?

A Well, that term is capable of a number of interpretations.

Q Well, that is what you thought about it—didn't you, when you got it? Don't you remember taking me to ride in that car?

A I recall the fact that you looked it over, and I think we rode together in it.

Q Don't you remember also that you were taking lots of other people for rides just after you got that car?

A Well, I know that the car was in regular use, and I didn't ride alone.

Q Don't you remember coming down to the Union League Club with that car frequently to attend conferences that Mr. Webster would have with—oh, various people? Sometimes I attended them and sometimes, I think, Mr. Becker attended, and—oh, every week almost that some one was being driven around in that car and then there would be a big luncheon down at the Union League Club, and then we would talk over this magneto and all that don't you remember it?

A I don't remember it quite that way.

Q How do you remember it?

A I remember occasionally there were luncheons at the Union League Club?

Q In a private dining room?

A There were two or three of them in a private dining room.

Q And the subject of those conferences at those luncheons was this high tension machine that you were developing, wasn't it?

A Not always limited to that. I fancy it always came up, as it was my remembrance that that was part of almost every conversation that I had with Mr. Webster.

Q You took people out in the Cadillac car to show them that high tension magneto, didn't you?

A That was the object of a great many of them; that was the object of the car, to show that.

Q You got the car in January; when did you get the magneto on it?

A The magneto went on it the middle of December, 1908.

Q That was at the factory or here?

A At the factory. It was driven around there at the factory around Detroit, a long while, and was left for them to demonstrate with, and they finally shipped it, the early part of January.

Q Who attended some of those luncheons when this high tension magneto was being talked of by Mr. Webster and you and everybody?

A Why, it seems to me that Mr. Webster would have Mr. Waterbury; Mr. Perkins quite regularly, when we could get Mr. Perkins; and Mr. Webster, and you, and I remember at times, as I recall it,—

Q Sometimes Towner Webster?

A Yes, sir, sometimes Towner Webster.

Q Sometimes Henry Ketchel Webster, his other son?

A Yes.

Q And then somebody who was to be interested in this machine also usually, wasn't there?

841 A Well, I wouldn't say 'usually.' 'Occasionally,' or 'at times,' there were. It is very difficult to recall all that.

Q There was lots of that sort of thing going on, wasn't there?

A It happened a number of times.

Q You have been here throughout the trial of this case, I believe you said, and heard the testimony?

A With the exception of a very little, a very short period.

Q Now, let me call your attention to the preliminary statement of John L. Milton in this interference No. 39013 between Milton and Kane in the form of an affidavit, sworn to by you: let me ask you whether you executed this affidavit: (Reading)

'State of Michigan }
'County of Wayne } ss.

'John L. Milton, of Detroit in the County of Wayne and State of Michigan, being duly sworn deposes and says:

'I am a party to the interference declared by the Commissioner of Patents on August 24, 1915, between letters patent No. 1096048 issued to me on May 12, 1914, and an application for letters patent said to have been filed by Edmund J. Kane; to the best of my knowledge and belief that I conceived the invention set forth in the declaration of interference on or about the 15th day of August, 1908; that on or about the 15th day of August, 1908, I first made drawings of the invention; that on or about the 15th day of August 1908, I first explained the invention to others; that I first reduced the said invention to practice on or about the 24th day of September, 1908; that the said invention has gone into wide and extensive commercial use, and that I filed an application for British letters patent covering the same invention upon the 28th day of October, 1909, which said application was given No. 24838 of 1909.'

Mr Bulkley: Read the question.

842 (Question read as follows: 'Now, let me call your attention to the preliminary statement of John L. Milton in this interference No. 39013 between Milton and Kane in the form of an affidavit, sworn to by you'—

The Court: He may answer.

Mr. Williams: He hasn't read the whole of the question.

The Court: He may answer.

Mr. Williams: Q The question is now whether you executed an affidavit in the form in which I have read it.

A I did.

Q How?

A I did.

Q That was in November 1915, was it not?

A 1915.

Q Now, Mr. Milton, when was it that your recollection of these dates,—for example, the date of the first reduction to practice of this invention,—became so changed from the date as stated in this preliminary statement where you said that it was first reduced to practice on the 24th of September 1908?

A Well, this preliminary statement was made—

Q No. The question is when you changed your recollection of that matter, of that date.

(Objection—discussion—no ruling.)

Q Let me ask you now again: When did you reduce to practice—

A As I recall it—What is that question now? I can answer you, but I have to answer one question at a time.

Q You have only one question to answer at a time. Before answering the previous one, let me ask you this: When do you say now that you first reduced to practice the subject-matter of the invention involved in the interference?

A I say now, after having gone over the records and refreshed my memory, and gotten the models before us, and giving it further considerable thought and study, that it was in the middle of April, 1909. Now, your other question—

843 Q Now, the other question is in effect as to when it was that your recollection of the date of reduction to practice became changed to that extent,—that is, from the 24th day of September, 1908, to the middle of April 1909.

Mr. Peaks: That is the question that I object to.

The Court: He may answer.

The Witness: Why, when that preliminary statement was heard—

Mr. Williams: Q Now, Mr. Milton, the question is—

The Court: When was it?

The Witness: When I took it up with—Well, now, let me see. It is hard to say at this time when I found that that statement was fixing the date too early; it seems to me it was when this case was brought up actively that I became aware of that fact.

Mr. Williams: Q You mean became actively aware during the trial of this case?

A No, when you were taking it up with me for my early date on that, in Detroit, in 1916.

Q Let me see: I talked with you in Detroit on October 6, 1915, didn't I?

A 1916 wasn't it?

A That date was fixed between you and me, working jointly, because you prepared the preliminary statement and I showed you what I had and we fixed it in terms we had of that, and we estimated it, and when we got to the work of bringing up the actual, tangible evidence we found that that date was too early.

Q When was it we found that to be the case?

A I don't say definitely now just when it was, but it was during—

Q It was before you gave your testimony in the interference, was it?

A I don't think so.

Q When did I work, or any one connected with my office, work actively with you about any of these matters before you gave your testimony in the interference?

A Well, that change must have been after we got into the case here.

844 Q Oh! Don't you remember as a matter of fact that you met me at Racine, or I saw you at Racine here,—When was that, Mr. Brown?—within a day or two after you met Mr. Bulkley and Mr. Podlesak up there, as you have testified?

A Yes, you were there.

Q Didn't you tell me then that you had been unable to find anything further which would in any way alter your recollection of the facts as you had stated them at the time of the interference?

A I had not found anything at that time; I had not looked beyond the drawings that I have referred to in this case.

Q When was that that you saw me in Racine?

A The last of November, or the first of December, of last year, according to my best remembrance.

Q You are not right about that, are you? Aren't you mistaken about that, about that date?

A I may be, but I was up there a number of times, and I think it was the last time that I was up there that I met you.

Q Well, that wasn't last November?

A The latter part of November or the first of December, I said. The first part of December. Perhaps Mr. Bulkley can fix the date for us.

Q Up to that time, at any rate, your recollection of these dates, you told me, was in conformity with what you believed to be the case at the time of the interference and that you knew of nothing that altered your recollection of the facts as you had given them at the time of the interference, didn't you?

A I had not—

Q Well, you told me that, didn't you, then? Told me, and Mr. Brown, that?

A I—I think so. I did, yes.

Q Why, Mr. Milton—

A I am quite sure on that.

Q You told us all about how Mr. Bulkley and Mr. Podlesak ostensibly happened to run across you in a restaurant where you were getting a meal or something, and how
845 they came and sat down and talked about everything else under Heaven and then incidentally, apparently, made some reference to this matter that you have been testifying about? Didn't you tell me that?

A I remember—

Q And you had told Mr. Brown about it before you told me about it?

A Yes, I had.

Q When you talked to me and to Mr. Brown you said you had no recollection that would alter the facts as you believed them to be and as you stated them to be at the time of the interference?

A That seems to be very clear to me now.

Q So that your changed recollection of the dates and facts, of dates, came about—

A After I had gotten into the case and I had gotten into these papers that we have been using here. I could not place it definitely before, but that fixed it.

Q When you gave your testimony in the interference case you testified, did you not, as follows:

'According to my best knowledge and belief I conceived the subject-matter of the claims in this case on or about the 15th day of August, 1908, at which time I believe I started sketches and drawings and followed these with various modifications. Finally got it in form for actual construction'—

A That is in the testimony, which I gave without referring to any of these records that I now have before me,—I have had before me—

Q Any of them?

A I say, these records that I have used to fix these dates by.

Q Which records are you using to fix those dates?

A Mr. Webster's letters particularly.

Q Did you find among any records through which you have been searching recently any drawings made by Mr. Kane other than these two or—Well, any drawings made by Mr.

Kane, tracings made by him?

846 A None at all.

Q All the other drawings relating to this low tension magneto work which you have been able to find were made by parties other than Kane?

A Yes.

Q The only two made by Kane were those two which were produced by him and which have his date and name signed to them, April 11, 1909, and April 14, 1909?

A The one of April 14, 1909 is one that I remember Mr. Kane making very specifically under my instructions.

Mr. Williams: That is not the question, and I ask the answer be stricken out.

Q What I am asking you, or what I mean to ask you, is this: Whether all of the drawings that you now know anything about relating to this low tension magneto work of the Webster Company, whether those two are not the only two so far as you know which were made by Kane.

A That are in existence today, that I have?

Q Yes, that you know of now, as being in existence.

A That I know of, yes, but I haven't access to the Webster Company files.

Q That answers the question. Thank you. These people that you say you talked with: Freeman and Solomon; who were they? Anderson, McCarthy and so on. Where did you talk with them recently, as you said you did yesterday?

A Mr. McCarthy I talked to here in Chicago.

Q Well, how about the others?

A Mr. Freeman and Mr. Solomon and Mr. Murphy I talked to in Tiffin where I went on my way home from Cleveland, the last time I was over here.

Q What is that?

A I say, I went to Tiffin on my way home to Cleveland from here. I talked to them there.

847 Q When was it you went there? This trial started on the 13th of January,—

A The 13th.

Q —didn't it?

A Yes. About the 13th.

Q We took a recess on Friday,—let's see; the 17th of January, didn't we?

A Yes.

Q And you were notified then to be back here to continue with the trial on the following Monday, weren't you?

A Yes.

Q Did you stay here or go back to Cleveland?

A I went to Cleveland.

Q You didn't stay here?

A No.

Q How many days did you stay here, then following that?

A I stayed here—I had another appointment here in Chicago, at the Stromberg Motor Devices Company.

Q How long did you stay here?

A I stayed here Monday, Tuesday and Wednesday.

Q That took it through the 21st, the 22nd of January?

A Yes; it was about the 23rd.

Q About when was it that you learned in that week that we were not then going on with the trial of this case, either here or at Madison?

A Monday.

Q What day?

A I knew it Monday.

Q But at that time it was arranged, was it not, and you understood that it would go on here on the then following Monday, which was January 27th?

A Monday of this week.

848 Q No, January 27.

A Monday of last week?

Q That is on Monday the 20th of January, when it was determined that we were not then going on and when you

learned it you were given to understand, were you not, that we would proceed on the following Monday, which was January 27th?

A Yes. It was in that week that I went to Tiffin,—last week.

Q That is the week of January 20th?

A Yes.

Q When was it you learned during that week of January 20th we were not going on with this trial on January 27th, but were going to delay it until the 3d of February? What day was it that that come about—came to your attention?

A I do not remember what date that was.

Q Well, wasn't it on that Wednesday that you left here, the 22d day of January?

A I think I knew it before that. I am a bit confused on that.

Q At any rate you went then, on that Wednesday, January 22d, to Tiffin, didn't you?

A Yes.

Q Did you talk with Freeman and Murphy and these other people?

A Yes.

Q And who went with you to Tiffin?

A Mr. Mason.

Q Anyone else?

A No.

Q Did you go to Tiffin on more than that one occasion to talk with those people?

A No; that is the only time I have been at Tiffin in a long time.

Q At whose expense did you go there?

849 A My own expense.

Q I presume you are here at your own expense?

A I am here at my own expense.

Q Now, you heard Mr. McCarthy's testimony this morning, didn't you?

A I did.

Q He said, didn't he, in substance—didn't you understand him to say that you were not in charge of any of these departments of The Webster Electric Company?

A Mr. McCarthy's statement is very true in terms of when I first went there. When I first went there I had a very small little place and I was the sole operator in that department. I didn't have charge of anything. When Mr. Munn

came to me he was the only employe I had, the only man working under me directly. Still, we didn't have a department. We simply had a little bit of space caged off on the second floor of the old building, in the pattern shop, in the pattern storage.

Q At that time there was a big plant there with several hundred men employed, wasn't there?

A Yes.

Q Then what?

A Then it developed later on we got space up on the fifth floor, when we actually made a department of it.

Q That was part of a floor, was it?

A Yes, one corner of the fifth floor.

Q When was it you took charge of all departments of the Webster Manufacturing Company?

A I never did.

Q How?

A I never did.

Q Didn't you say yesterday, or the day before, that you had charge of all the departments?

A If I did it was an error. I do not remember having said it.

850 Q Did Mr. McCarthy substantially correctly state the relationships between you and the other people and parts of the organization insofar as your having your magnet work done is concerned?

A Yes.

Q You made some kind of a written contract with Mr. Webster or the Webster Manufacturing Company under which you were operating, didn't you?

A A number of them.

Q How?

A A number of them at different times.

Q Were you under some such written contract during 1908 and '09?

A I was under a patent contract, but I wasn't under any written contract regarding my services with Mr. Webster or the Webster Manufacturing Company.

Q The patent contract was a written contract, was it?

A Yes.

Q What was the date, if you recall, of the contract, the written patent contract, under which you were operating at that time?

A I think it was 1908. I have a copy of it.

Q Can you produce that?

A I can.

Q Will you?

(The witness produced the document in question)

Q Did you find the paper, Mr. Milton?

A Right here. (indicating)

Q The date of this paper which you produce is November 23, 1907, isn't it?

A It is.

Q And that is the patent contract under which you 851 were operating until when?

A Until it was terminated, which was when you and Lemmon and Teegle and I were in Cleveland in 1912, as I recall.

Q Now, when this contract of November 23, 1907, between you and—who was it?—Webster Manufacturing Company, was terminated the settlement involved—what, in a general way, was that settlement? What were the terms or conditions of it? That was the settlement, wasn't it, which involved the payment of some \$25,000 to you?

A You drew all those papers.

Q Yes, I know; but they are a pretty complicated lot of papers, and I just want to get a few salient facts. That involved the payment of some \$25,000 to you, didn't it?

A The Webster Company was to have title to my United States patents number—cases No. 1, 2, 3, 4, 5, 9, 10.

Q That is, the low tension cases.

A And one of them was a high tension. I was to have a license under the high tension.

Q Under the one high tension?

A Under one or two of them. Four and five were both high tension.

Q Then you took title to all of the high tension applications and patents, didn't you?

A Yes.

Q I asked you whether the Webster Company bound itself to pay you \$25,000?

A Deferred payments.

Q How?

A By deferred payments.

Q Wasn't there some cash payment?

A I believe that there was only—there were three notes that were to mature in the first year, and there was one cash

payment which was to take care of the notes that the
852 Webster Company had given and didn't meet when they
were due.

Q And the whole payment of \$25,000, insofar as it was
not paid in cash, was secured by these notes, wasn't it?

The Court: Q Gave notes for the balance.

A Oh, yes.

Mr. Williams: Q The payment was either in cash or
notes, wasn't it?

A It was either in cash or notes.

Q Now, when you say that the low tension patents were
to be, or title was to be, taken by the Webster Company, the
fact of the matter is that the assignment was first executed
in blank, and was to be held by me in escrow, to be delivered
only in the event that proof should be made to me of the
payment of all the notes, wasn't that the substance of it?

A Why, I would have to look up those papers. The sub-
stance was that you were to be the trustee. Just that whole
paper, I do not believe I ever read it. The thing is a very
complicated affair to me. I got the impression of a Chinese
bible when I commenced to look through them, and passed it
up.

Q You have copies of that settlement here, have you?

A I have.

Q Will you produce that, too?

A This appears to me to be a complete set (producing
documents).

Q How?

A This appears to me to be a complete set.

Q Now, these papers which you have just last produced
include, do they not, an assignment executed in blank, under
date of April 10, 1912, of cases 1, 2, 3, 5, 9 and 10, and a so-
called agreement, dated April 10, 1912, between yourself and
Webster Manufacturing Company and Webster Electric
Company, and another so designated escrow agreement, dated
April 10, 1912, between yourself and Webster Electric Com-
pany, and executed also by me as the party who accepted
the escrow?

A. Yes.

853 Mr. Williams: These three papers we will offer now,
or have them marked for identification. Unless there is
objection, we offer them now.

Mr. Bulkley: What did you say, Mr. Williams?

Mr. Williams: I say I wish to offer these papers just pro-

duced by Milton, which I have designated as Plaintiff's Exhibit number 64. These appear to be originals. I presume you will be glad to stipulate, as I will—

Mr. Bulkley: Yes.

This will be Plaintiff's Exhibit No. 64.

Mr. Williams: Now, this contract of November 23, 1907, between yourself and Webster Manufacturing Company, I offer in the same way, and ask that that be marked as Plaintiff's Exhibit No. 65, and I presume everybody will agree that we may substitute a copy in lieu of the original.

Mr. Bulkley: Yes.

Mr. Williams: Q Now, this contract of November 23, 1907, between Milton and Webster Electric Company—

A Webster Manufacturing Company.

Q —Webster Manufacturing Company, reads in part as follows:

'Now, therefore, the parties hereto covenant and agree as follows:

1. That any and all prior agreements between them relating to the aforesaid inventions or improvements in electric generators, and the aforesaid applications for letters patent therefor, are cancelled and shall from now henceforth for all time be considered cancelled and of no force and effect, and in consideration of the mutual considerations and covenants hereinafter set forth shall be and are superseded by this agreement which is entered into in the stead of any and all such prior agreements.

2. The said John L. Milton, party of the first part, hereby gives and grants to the Webster Manufacturing Company, party of the second part, its successors and assigns, 854 the sole and exclusive right and license to manufacture, use and sell, throughout the United States and territories and possessions thereof, electric generators for ignition purposes and ignition apparatus embodying and containing the said Milton improvements, for and during the life of any and all Letters-Patent of the United States which may be granted for any and all such Milton improvements.

3. During the life of this agreement all inventions or improvements made by the said part of the first part relating to electric generators for ignition purposes and to ignition apparatus for use in connection with internal combustion engines or motors; all applications for Letters-Patent of the United States made by the said party of the first part relating

to electric generators for ignition purposes and to ignition apparatus for use in connection with internal combustion engines or motors, and all patents granted to the said party of the first part relating to electric generators for ignition purposes and to ignition apparatus for use in connection with internal combustion engines or motors, and all such inventions or improvements and the patents therefor, in which he shall have or acquire any interest, shall be regarded as and shall be embraced by and included within the terms of this contract and agreement.'

Now, Mr. Milton, the patent application which was filed in the United States and which disclosed the machine shown in your British patent which was applied for on October 28, 1909,—that application and any invention involved or shown in it came under this clause of this contract which I have just read to you, did it not?

A The United States, yes.

Q And that was your understanding of it at that time?

855 A Yes.

Q And was it your understanding in 1909, and in 1910, and in 1911? Well, we will say in 1909 and throughout 1910. It was your understanding that the Webster Company had the right, was it, to manufacture, use and sell any invention made by you, and including this Plaintiff's Exhibit No. 15 type of machine, regardless of whether or not they paid for any patent application and regardless whether any patent application was filed—that that was immaterial; that they had, at any rate, the right to make and sell the machine, and that you had no right under this contract to say a word to stop them? Was that your understanding?

A Subject to the terms of the contract. That was my understanding.

Mr. Peaks: Wait a minute. I would like to object to that question.

The Court: He has answered all right; 'subject to the terms of the contract.'

Mr. Williams: Q Now, you brought some suit, didn't you, against the Webster Electric Company, as the successor of the Webster Manufacturing Company, just prior or shortly before this settlement of April 10, 1912?

A I think it was against the Webster Manufacturing

Company. The Webster Electric Company may have been made a party to it. I do not recall that. I could look it up.

Q Can you state in a general way what that suit was for?

A They had issued me some notes for royalties. When they were presented they didn't pay them. That is what precipitated the trouble.

Q Was it a suit on the note that was commenced?

A There was a suit commenced on the note. There was a suit commenced for having failed to live up to some of the other terms of the contract.

856 Q Did you allege or assert that the Webster Company's license had in some way been forfeited or abrogated at that time--terminated?

A I wouldn't say as to what the technical wording of that complaint was. I do not recall it. I can get you a copy of it, if you want it.

Q Well, regardless of the papers involved in the suit, is it a fact that you were at that time asserting in one way or another to the Webster Company that either their rights, their license, had been forfeited or would be by you terminated? Was there that pressure which forced the settlement, that is what I am getting at, the pressure of such assertions or threats?

A I wouldn't want to try to answer that from a legal standpoint. I do not know. But I will say that because the contract hadn't been lived up to, they hadn't paid the notes they gave me in lieu of royalties, and they hadn't paid the royalties, and there hadn't been reports made, all of which were called for by the contract.

Q Now, will you produce here the papers that you say you have in connection with that suit? Have you got them here in the court room?

A I have not.

Q Have you got them here in Chicago?

A I have some of them. Whether it is complete or not I do not know. I have the file where they should be.

Q Are you willing we should see all the papers that you have here in the court room, and at your hotel, that you have brought for use in connection with this testimony with this testimony of yours or this litigation?

A I have no objection to your seeing them.

Q Could we look over during the noon hour what you have here in court?

A Why, yes, readily.

857 Q I would like to do that, if you make them available.

Mr. Peaks: Counsel and the witness will go through them together.

The Witness: Of course.

Mr. Williams: Q This Gerald Cheville that has been referred to, he was a very expert chauffeur, was he not?

A Yes.

Q That is his business now, isn't it?

A I understand it is not.

Q Well, it has been, hasn't it, until very recently?

A I would say within a few months.

Q Do you know where he is now?

A The last I heard of him he was in California.

Q Wasn't he employed by the Webster people primarily because of his ability as a chauffeur and in order to demonstrate these high tension machines on automobiles?

A I would say not. The first I remember of him he was drafting in the drafting room.

Q Had he been, do you know, engaged as a chauffeur at any time before he went to work for the Webster Electric Company?

A I understood he had. In fact, I am positive he had.

Q He devoted a very large proportion of his time, did he not to keeping the automobile in shape and in demonstrating the high tension magneto upon the automobile or automobiles?

A No, he didn't spend much of his time for that. He spent a portion of his time on it.

Q He devoted most of his time to high tension magneto work.

A Most of it.

* * * * *

(Recess)

858 The Witness: There is a correction in the record I would like to make. I was in Tiffin on the 22nd of January, instead of on the 23rd.

Q I wish, now, Mr. Milton, that you would look at this blue print, Defendants' Exhibit No. 21, dated June 3, 1909, and say whether that is the blue print to which you referred in your direct testimony as having, in accordance with your belief,—for every reason, as I believe you said,—been made by Mr. Kroeplin.

(Exhibit shown witness).

A This is the drawing, blue print.

Q Now,—

A I want to modify that, and say that while the drawing in its entirety might not have been made by him, I am very sure that he made a number of the figures on this.

Q Have you talked with Kroeplin about that matter?

A I have.

Q Within a day or two?

A Not within a day or two, but sometime ago.

Q Well, you did talk with Mr. Kroeplin here yesterday, didn't you?

A But not with reference to this print.

Q Now, here is another blue print, marked Defendants' Exhibit 17, which, as I understand you, is of a tracing which was made by Kroeplin. Is that correct?

(Exhibit shown witness)

A I believe that this was made by Kroeplin.

Q Now, when you say you believe that, on what do you base that belief?

A Well, I know his character of drawing, and I could identify his style of lettering, and I see his initials are also on it; and I remember of working with him on this design.

Q Now, let me call your attention to this fact—that 859 the lettering on these two drawings,—that is, the drawing Plaintiff's Exhibit No. 21 is quite different from the lettering on the other one, marked Defendants' Exhibit No. 17. Let me call your attention particularly, for example, to the word "details", as it appears in both, and to the characteristic difference between the lettering in which that word appears in the two drawings; and let me call your attention also to the fact that in one the figure "2", for example, is always in a particular form or style, whereas in the other it is invariably in another and different style; and the same with respect to the 9's. Do you note the characteristic differences in those matters to which I call attention?

A I note the characteristic difference in some of the matters that you call my attention to. There are some of the 2's in both of those drawings that appear to me to be the same, and some of the 2's are entirely different. That has been pointed out to me by Mr. Kroeplin, as well as by my own observation.

Q When did Kroeplin point that out to you?

A Kroeplin pointed out the difference in the 2's on this blue print, this blue print of June 3, 1909, last week.

Q Notwithstanding that, you went on here, and testified in your direct testimony, did you not, that both were made by Kroeplin?

A I do not say that I did testify that Mr. Kroeplin made all of this, because I had that distinctly in mind.

Q But you are stating now what you believe to have stated in your direct testimony?

Mr. Peaks: I object.

A Yes.

Mr. Williams: Q Are you?

A Yes, sir.

Mr. Peaks: That is not competent. The witness is asked now to characterize the effect of the testimony he gave in chief. That is a matter for the court, and not for the witness?

The Court: But he is stating a matter of fact about it.

860 Mr. Peaks: It is argumentative. It is simply—

The Court: Well, let it stand.

Mr. Williams: Will you read him the question now, please? (Last question and answer read).

Q That is, as to this Defendants' Exhibit No. 21 (indicating).

A Is this (indicating) the same one?

Q Yes.

A Twenty-one, is right.

Q I call your attention to this part of your direct testimony: Mr. Bulkley asked you:

'Q. What is this blue print which I show you now?

'A This is a blue print of the working drawings of the unitary structure plug bracket for supporting the magneto, and the mechanism for operating the magneto. It is a Webster Manufacturing Company drawing, "details of Type D-2 Milton magneto for I. H. Co., 6, 8 and 10-horse power horizontal engine." The last is the legend in the lower right hand corner, and bears the date, June 3, 1909.

'Q Who made the drawing of which that is a blue print, do you know, Mr. Milton?

'A I know that—I want to modify that. I have every reason to believe that this print is from a tracing made by Mr. Kroeplin, and also that he made the drawings from which the tracings were made.'

Is that part of your direct testimony—

A Yes.

Q —to which you alluded just now?

A Yes, sir.

Q And that is where you said, during your direct testimony, that a part only of that was made by Kroeplin, and the rest by somebody else?

A Well, I did not say it—Evidently I did not finish it, but that is what I had in mind, because it had been called to
861 my attention just last week, when I asked Kroeplin to identify this.

Q So that the statement in your direct testimony is not correct as it stands here, and as I have read it to you?

A It is not completely correct.

Q Who made the other part of this drawing, that Kroeplin did not make?

A I do not know definitely who made the tracing for him.

Q Which part did Kroeplin make?

A Of the tracing, or of the drawing?

Q The tracing, of which this is a blue print.

A I believe that Kroeplin made the bracket structure, and the laminated iron inductor.

Q You are comparing the two drawings now, I notice, that is, this Defendants's Exhibit No. 17, with the Defendants' Exhibit No. 21, are you not?

A Yes, sir, and also parts, different parts of No.— and different figures, on 21, with each other.

Q Well, go ahead, and then finish your answer.

A Some of the other figures looked as though they may have been made by two different parties. I would not want to say definitely that I thought Kroeplin made any, but these ones that I have mentioned,—that is, in their entirety.

Q Now, the drawing that you have been comparing this Defendants' Exhibit 21 with, as showing the unitary structure, is a drawing which has the letters, "Drawn by W. A. K.; traced W. A. K.'s is it not?

A Yes.

Q Now, why is it that you believe certain figures on this drawing of the unitary structure were made by Kroeplin? Is it because you remember that to have been the fact, or because of your comparison of the drawing which does not have Kroeplin's name or initials, with the drawing which does have upon it his initials

A I remember working with Kroeplin, and giving him instructions on these figures, and I do not remember of 862 watching him make any tracings. I believe yet that he made all of the drawings from which these tracings were made.

Q And that is based upon a study of the drawings themselves, as I understand it?

A No; it is from remembrance of when we were working at the time, as well as looking at the drawings.

Q Now, during your direct testimony, Mr. Milton, you said, in referring to this Kane drawing, dated April 14, 1909, the following, in answer to Mr. Bulkley's question, which I will read: the question was: 'Q Did you ever see this drawing, Exhibit No. 18, Plaintiff's Exhibit No. 18'; and you answered did you; 'I remember the idea, as shown here, very plainly; I have no direct way of identifying this particular drawing'?

A Yes.

Q Now, during the further direct examination by Mr. Bulkley, the following occurred, did it not,—and in accordance with your recollection: Mr. Bulkley asked: 'Now, I will ask you again Mr. Milton, what I started to ask you before with reference to this Exhibit 18, and in connection with what Mr. Kane said you said when he, Kane, showed you this drawing, Exhibit 18; Mr. Kane said he showed you—' Whereupon I interrupted, with the following objection: 'I object to this question, for the reason that this witness has testified that he does not recall Kane ever having shown him that drawing.' Whereupon the court said: 'I thought he did.' I said: 'I do not think so.' Whereupon Mr. Peaks said: 'How about it, Mr. Milton?' Whereupon I said: 'He saw the drawing on white paper.' And then you said: 'I certainly stated this drawing here. Mr. Kane and I worked over it together; I am positive of that.'

Is that your recollection of the testimony?

A That is my recollection of the testimony. Of course, keep in mind the limitation—

Q Well, now, you have answered the question.

863 A (Continuing) —I put upon it before.

Q You have answered the question. What do you say now,—that you did see this drawing, Plaintiff's Exhibit No. 18, at the time it was made, and that you worked over it with Kane; or that you did not see it; or that you cannot

identify this as anything that you saw? Which, now, do you say is the fact?

A Why, I say that we worked over this design,—I instructed Kane upon this design. Whether this is the drawing—

Q I am asking you about the drawing itself.

A —whether this is the drawing, the absolute piece of paper that we made at that time, I do not know; I made no marks on it that I can identify.

Q So that you do not say now that you did work over this particular drawing?

A This particular piece of paper.

Q Well, the drawing is on that paper, and I call the paper a drawing; but, at any rate, you say now that you did not,—or, at least, you do not know that you worked over this particular piece of paper, in making this particular drawing with Kane; is that right?

A I cannot identify this particular piece of paper.

Q Well, am I right in what I say,—that you cannot say, and do not say now, that you worked over this particular piece of paper, Plaintiff's Exhibit No. 18, with Kane, in making the particular drawing which appears upon it now? Is that your testimony?

A I cannot say that we worked over this particular piece of paper, as I have no means of identifying it.

Q And you do not say now that you ever saw this particular piece of paper, with this drawing upon it, at about the date which it bears, that is, April 14, 1909?

A No, I do not say so.

Mr. Williams: That is all.

Q Mr. Milton, when Mr. See came out to see you on October 6, 1916,—I believe—Is that the right date?

A No.

Q Or was it October 8th?

A I think it was in January, 1917. I don't remember just when it was.

Q Do you remember the date when Mr. See came to see you?

A Just a minute.

Q And you had this conversation?

A I will give you that exactly.

Q May 8, 1916, when Mr. See came out there, and you had the talk with him, did he tell you anything about the Webster Company having purchased the Kane application?

A No, he did not tell me that. I got that information from Mr. Williams, if I remember correctly.

Q When did you get that information?

A I cannot say.

Q About when, as near as you now remember?

A It is rather difficult to fix that, and state it definitely and positively.

Q Was it prior to the time that you had the interview with Mr. See of May 16, 1916?

A I think not.

Q Now, when Mr. Williams came out to talk to you about this preliminary statement, your preliminary statement in the interference case, what did he tell you about the dates to be alleged in your preliminary statement? What general instruction did he give you?

A To make them as early as I could,—that was the safe way to make them.

Q Is that what he told you, Mr. Milton?

A That is my remembrance of it.

Q As you remember it?

865 A But I know that I was cautioned to make them as early as I could, I believe was the term used.

Q Mr. Milton, do you remember a drawing which you used in connection with the giving of your testimony in the interference case, which illustrated the complete ignition device, in the form in which it was delivered to the International Harvester Company, as a standard product?

A The drawing of that?

Q Yes, which you used in the interference proceeding? Do you remember that drawing?

A I do not remember it.

Q Have you any such drawing in your possession?

A Is that a working drawing,—supposed to be?

Q It says it is a blue print, it was a blue print.

A No.

Q The tracing of which was made by Mr. Chiville?

A I have no way—

Mr. Bulkley: Mr. Williams, I wish you would produce that drawing.

Mr. Williams: We are looking for it. We produced here, Mr. Bulkley, the drawing which was marked in the interference case as 'Milton's Exhibit No. 1, blue print of tracing of July 15, 1909'. Is that the one?

(Document produced by Mr. Williams.)

Mr. Bulkley: That is the one.

Q Mr. Milton, will you look at this drawing, and state what it illustrates?

(Document handed to witness)

A This is an assembly drawing of a Milton magneto on an integral bracket, with the sparker mechanism, as furnished to the Harvester Company.

Mr. Bulkley: The blue print is offered in evidence, and marked Defendants' Exhibit 45.

866 (The said document was thereupon admitted in evidence, marked as Defendants' Exhibit 45, and was and is as follows:)

Mr. Bulkley: Q Did Mr. Williams ever tell you anything about an affidavit which was made by Mr. Chiville, with reference to this development of the unitary plug and bracket?

A He told me that Chiville was making or had made an affidavit.

Q Did you ever see that affidavit at or about the time that you testified in the interference case, or before then?

Mr. Williams: What was the question, please? Pardon me.

(Question read)

A I never read it, if I did see it. I do not remember having seen it.

Mr. Bulkley: Mr. Williams, will you produce the copy of an affidavit which was filed, the original of which was filed in the Patent Office in connection with the proceedings in the Patent Office, of interference between Milton and Kane, made on the 12th day of May, 1916, by one Gerald D. Chiville?

Mr. Williams: I will do it, if we have it. Do you mean right now? Is that it?

Mr. Bulkley: Oh, not particularly.

Mr. Williams: Yes, Here is the original affidavit, Mr. Bulkley.

(Document produced by Mr. Williams).

Mr. Bulkley: We offer in evidence the original affidavit of Gerald B. Chiville, executed on May 12, 1916, which was filed

in the Patent Office, in the interference proceeding between Milton and Kane, marked Defendants' Exhibit 46.

Mr. Bulkley: Will you stipulate, Mr. Williams, that that has been offered as the testimony or deposition of Mr. Chi-ville in that interference proceeding?

Mr. Williams: I will stipulate whatever the record shows to have been the fact. I do not recall.

Mr. Bulkley: What record?

867 Mr. Williams: The interference record.

Mr. Bulkley: I offer in evidence, if the court please, a printed copy of Milton's record in the interference in the Patent Office, between the application of Kane and the patent of Milton, the number of which interference is 39,013, to be marked Defendants' Exhibit 47.

Mr. Bulkley: And I offer, also, in evidence, the printed copy of Kane's record in the same interference, to be marked in evidence Defendants' Exhibit 48.

Mr. Williams: We object, your Honor, to the receipt of these papers in evidence, on the ground that they are irrelevant and immaterial.

The Court: They are probably relevant on the question of collusion, possibly.

Mr. Williams: Upon that question.

The Court: But nothing else.

Mr. Gifford: Of course we do not base our case on the interference at all.

The Court: No.

Mr. Gifford: We put in the testimony here as a part of the prima facie case, as though no interference had ever taken place.

The Court: But it is a very common thing in patent cases to put in an interference record. Received subject to objection. I do not think it is material, upon any other question.

Mr. Bulkley: I also offer in evidence a copy of the file contents of the Patent Office, in the matter of the interference between Kane and Milton, the same to be marked Defendants' Exhibit 49.

The Court: That contains these same two records, I suppose.

Mr. Sturtevant: Yes.

* * * * *

The Court: You had better withdraw your printed copy then, for convenience.

Mr. Bulkley: We will see about that later, your Honor, and withdraw it, if they are both embodied in that.

Mr. Williams: We make the same objection.

The Court: It may be received, on the one question.

Q Now, Mr. Milton, you say here, or, you said here just a few minutes ago, in answer to Mr. Bulkley on redirect examination, that when Mr. See talked to you in Cleveland on May 8, 1916, about the evidence which could be produced to substantiate your claims of inventorship, that he did not tell you, and that you had not previously learned from me, that the Webster Company had acquired the Kane application. That is what I understand you to say. Is that right?

A I do not recall Mr. See's having mentioned that to me at that time; and yet, I positively, do not remember it.

Q All right. And you say that you had not previously learned of that fact from me. This is what you said to Mr. Bulkley here just now? Was it not?

A I do not remember just when I did learn, and I do not think I knew it at that time; I think that is what I said.

The Court: Yes, that is what he said.

Mr. Williams: Q Well, now, you do remember that Mr. See asked you, when he talked with you, whether you would be willing, in view of all the evidence which would be secured from these witnesses that you had named, that is, Munn, Chiville, Webster, Kane, and all of them,—you do remember that See asked you whether you would be willing to execute a concession of priority to Kane, don't you?

A Yes, sir.

Q That you do remember?

A Yes.

Q Now, what earthly reason can you suggest now as to why See would have proposed to you executing a concession of priority, unless the Webster Company owned the Kane application? Did he give you any reason, when he talked to you, for asking you to execute that concession of priority, without your knowing that the Webster Company, whom Mr.

See represented, owned also the Kane application?

869 A Did he give me any earthly reason, do you say?

Q I guess I asked you an improper question, as to whether you could suggest any earthly reason why he would

have asked you to execute the concession, without your knowing that we owned the Kane application. But I will ask you the proper question,—as to whether, when he did ask you to execute, or whether you would be willing to execute the concession of priority to Kane, whether he did not say anything about, and you did not know anything about the fact, whether the Webster Company owned the Kane application.

A Well, I will tell you—I might have known, at that time, but the thing has escaped my memory; I do not recall of having known, at the time I talked to Mr. See.

Q Well, then you will not swear that you did not know it will you?

A No, I do not want to commit myself on that, because I won't say definitely one way or another.

Q Now, another thing, about this Chiville affidavit; you say you may have seen the affidavit, but you do not recall having read it, as I understand?

A Yes.

Mr. Williams: Q Do you remember this, that I told you, and when I told you I referred to a written memorandum which I had made at the time, that I told you that after my first visit with you in Cleveland about this matter, on the 6th of October—

A Cleveland?

Q 1915—How?

A You didn't talk to me about it in Cleveland.

Q What is that?

A You didn't talk to me about it in Cleveland. I just want to call your attention to the fact that we both make errors.

* * * * *

Mr. Williams: Q What I should have said was Detroit, and what I want to ask you is this: After I talked with you in Detroit, on October 6, 1915, I saw you again in Chicago and told you, didn't I, that during the interval I had seen Chiville, gone to see him here, and in telling you about it I referred to a written memorandum of the conversation with Chiville which I made at the time, and didn't I tell you that Mr. Webster and Mr. Brown and I went together to see Chiville, and that we first outlined the story as we had gotten it from you, to see in how far he could confirm it, and he, without saying much, nodded his head as though he was agreeing with all that we told him, told him what we understood to be the facts in the matter, and that

then, just as we were about to leave, he said, 'Now, I remember this about it, that Mr. Webster said to me and to Kane, "You boys see what you can do to work out of this difficulty, and you make whatever you can think of at home, make drawings of it and bring them down here and show it to me,"' and that Chiville told us at that time that he made some drawings at home and that Kane made some drawings at home and that they were all brought down to the office at the factory, and that his, Chiville's proposition was no good and was discarded and that Kane's was the one that was adopted; now, don't you remember that I told you in substance that?

A When was this you told this to me?

Q This was some time between the 6th of October, 1915, and May 8, 1916, when Mr. See talked with you.

A I remember your telling me—I don't remember your referring to any memorandum. I remember your telling me that you had talked to Chiville.

Q And that you had this—

A Well, the substance of the conversation. I don't remember the whole thing, but I remember, or I got the impression that Chiville was not positive in what he was saying or that he was rather going to support Kane than
871 me. I also heard from Mr. Chiville before he did give you that testimony.

Q What?

A I say I also heard from Mr. Chiville before he gave his testimony. I had a letter from him in my possession when Mr. See was over there.

Q Now, what did you say about this letter here, a moment ago, about receiving a letter from Chiville?

A I said I had—I was in possession of a letter from Chiville at that time.

Q Where has that letter been from then until now?

A In my bag.

Q Is that one of the papers that you said you would get out this morning for us to look over in the noon hour?

A I opened my case. This was one of the papers I got out of it. I opened my case and presented it to Mr. Frank and to you. I said, 'You can go through anything I have got.'

Q Mr. Frank now hands me this letter, dated Chicago, Illinois, May 5, 1916, addressed to 'Dear John,' and signed

'Gerald D. Chiville.' The envelope is postmarked May 5, 1916. Is that the letter (handing document to witness)?

A That is the letter.

Q When did you receive that letter?

A In due course.

Q That is, May 6th or 7th?

A Somewhere around there.

Q 1916?

A Yes, sir.

Q This letter was addressed to you at 3000 West Grand Boulevard, Detroit, Michigan, was it not?

A Yes, sir.

Q That is the letter which reads as follows, is it not: 'Chicago, Illinois. May 5, 1916. Dear John: Mr. Robert M. See, of Williams, Bradbury & See, has asked me to 872 sign an affidavit containing my recollection of the originating of the idea of mounting a low tension magneto on the ignition plug casting; also of the tripping of the moveable electrode by inductor shaft yoke.

'All that I can recall now is that Mr. T. K. Webster asked Kane and me to design the most compact and simple outfit we could. We worked out our ideas separately and Kane's design was accepted and used.

'If that affidavit and the above will work against your interests in any way, I will try to get out of signing one.

'I have said I would sign one and then I thought it might affect your interests, so I write to find out.

'Mr. See says he is to see you in Detroit Monday. Please keep this letter to yourself.

'We are all well and hope you are too. Give our best regards to Mrs. Milton and the little girl. Answer this letter right away, please.

'Yours very truly,

'GERALD D. CHIVILLE,
'3449 Elaine Place.'

That is the letter that you referred to, is it?

A Yes. The reply ought to be right with that.

Q Now, let's see, Mr. See talked with you on May 8, 1916, didn't he?

A Yes.

Q So that you had this letter from Chiville before he talked with you?

A Yes, sir; and my reply mentions that fact, my reply to Chiville.

Q You didn't show Mr. See this letter you had gotten from Chiville, did you?

A No, I did not.

873 Q On May 8th?

A No.

Q You never showed it to me, nor to the Webster Company?

A No, I did not.

Q Nor to Mr. See, nor to any of us?

A No, sir.

Q Have you?

A No, sir, I did not.

Q From that day to this?

A No; I did not. There is just a little—

Q You have answered the question, Mr. Milton, thank you. Mr. Peaks: Will the reporter read that last.

(Last answer read.)

Q Now, that, of course, was all months before you gave your testimony in the interference case, wasn't it?

A Yes, sir.

Mr. Williams: I think we will offer that letter and ask that it be marked as Plaintiff's Exhibit No. 66, isn't it, the letter and the envelope?

Mr. Williams: Is this paper, which purports to be a carbon copy of a letter dated May 9, 1916, and addressed to Gerald D. Chiville, Chicago, and not signed, but bearing a name or initials, 'J. L. M.: MAC' the reply which you made to Mr. Chiville's letter of May 5, 1916 (handing document to the witness).

The Witness: A It is.

Mr. Williams: Now, this carbon copy we offer and ask that it be marked as Plaintiff's Exhibit 67.

Mr. Williams: Q Now, this letter of yours of May 9, 1916, to Mr. Chiville, read in part as follows: 'Your letter of the 5th instant reached me Saturday afternoon, and knowing that Mr. See was to call on me Monday, I delayed answering your letter until this time.

874 'The question of advising you in this matter is a rather difficult one as the events referred to transpired quite a long time ago, and it is no wonder that our minds are a bit hazy on the subject.

'Mr. See had a number of sketches with him, one in particular that was found in Brown & Williams' old files of my patent application that was never filed. This refreshed my mind very materially. It was for the type of magneto operating mechanism that I made to overcome the trouble encountered with the first I. H. C. type of spring operating magneto.'

A It was either the two or the single link; I can't say now.

Q At any rate, something preceding—

A Yes.

Q —the apparatus of Plaintiff's Exhibit 15 type?

A Yes.

Q Now, that letter goes on: 'That he, Mr. See, had with him the sketch that was made by Kane under my instructions for the type of bracket which was finally adopted. He also had a tracing that Kane had made and which I believe is the one you mentioned in your letter. It carried the main coil springs attached to the inductor by means of studs extending through the spider, and the other and extending to the outside end of the pole pieces. This apparatus was bolted onto the spark plugs and was a two-piece affair. We never built it owing to the fact that it was impractical, very complicated, and not direct.' Now, does that, or do those passages from this letter refer to the drawing, Plaintiff's Exhibit No. 17; is that the drawing of which you were writing about to Mr. Chiville?

A If this is the same drawing that Mr. See showed me, and I think it is.

Q Well, is it the same?

A Well, I didn't make any mark on it at that time. I don't remember definitely, but if it is the same drawing
875 I would say that was my criticism of it. It is the same idea.

Q Is it your recollection that this is the drawing that See showed you and about which you thus wrote to Chiville?

A It is either this or a duplicate of it. I would say it is the same drawing.

Q Now, let's see; you wrote there that that drawing or a duplicate of it was a two-piece affair, that it was impractical, very complicated and not direct?

A (No answer.)

Q I call your attention now to some papers purporting to be some letters passed between you and myself, or my of-

fice, as follows: October 11, 1915, your letter to me; November 5, 1915, my letter to you,—make it Williams to Milton; November 19, 1915, Williams to Milton; November 20, 1915, Milton to Williams; December 30, 1915, Williams to Milton; January 3, 1916, Milton to Williams & Bradbury; January 4, 1916, Williams to Milton; January 6, 1916, Milton to Williams & Bradbury; January 11, 1916, Williams to Milton; May 3, 1916, Williams to Milton; May 5, 1916, Milton to Williams, Bradbury & See; May 6, 1916, telegram, Williams, Bradbury & See to Milton; May 9, 1916, Williams to Milton; September 11, 1916, Williams to Milton; an undated letter, Milton to Williams, Bradbury & See, saying 'In reply to your letter of the 11th instant', and so forth; October 27, 1916, Williams to Milton; October 28, 1916, Milton to Williams, Bradbury & See; October 28, 1916, telegram, Milton to Williams, Bradbury & See; December 1, 1916, Williams to Milton; December 5, 1916, Milton to Williams, Bradbury & See; December 18, 1916, Williams to Milton; December 26, 1916, Milton to Williams, Bradbury & See; December 27, 1916, Williams to Milton. Can you identify those as constituting the originals or authentic carbon copies of correspondence which passed between you and me or my firm, between the dates covered and as read to you?

(Objection)

876 The Court: He may answer the question, whether those are the letters or copies.

The Witness: I can't identify them from just such a rapid glimpse at them. I have to go over them.

The Court: Well, you can take them and look them over.

The Witness: Well, I shall do that later on.

Mr. Williams: I think I shall offer those letters now, that batch of correspondence, as Plaintiff's Exhibit No. 68. I offer them now.

The Court: I will reserve the ruling on them until he has had time to look them over.

Mr. Williams: Surely.

Mr. Peaks: If we can take them over night, we can read them over this evening.

Mr. Williams: You will find there, I think, Mr. Peaks, the originals of many of those letters you yourself have put in, and I will ask you this question Mr. Milton: To state now if you can, if you cannot now, if you will undertake before you leave to ascertain whether there were any other letters

that passed between me and my firm and you relative to the matter of the Kane-Milton interferences in addition to those which I have last submitted to you and included in this Plaintiff's Exhibit No. 68.

The Witness: I shall do so.

Q Now, you have us an opportunity during the noon hour to look over some of these additional papers which you said you brought with you, didn't you?

A Yes.

Q Do you still have some that we have not had an opportunity as yet to see?

A This file, I told Mr. Frank when he was ready for this I would turn it over to him. That completes it. (Handing documents to counsel).

Mr. Williams: That is all, except we would like to reserve the right to recall Mr. Milton when we have gone through the balance of these papers which he has submitted.

(Witness excused)

877 WILLIAM AUGUST KROEPLIN, called as a witness on behalf of the defendant, testified as follows:

Direct Examination by Mr. Bulkley.

Secretary and treasurer of the Sheet Metal & Conveyor Company. Was in the employ of the Webster Manufacturing Company from May 24, 1905, until about July 15, 1916. Started as an office or blue-print boy and ended as a sales engineer. Also worked as a draftsman. Knew John L. Milton and worked under him. Was instructed by the chief engineer of the Company, the chief draftsman. Being shown the blueprints Defendant's Exhibits 17, 18, and 19 witness stated that he made the original drawing and the tracing from which the blueprint No. 17, dated November 27, 1908, bearing No. 101, was made. Identified this by the character of his work and by the initials of his name. Witness further identified three views of the blueprint Exhibit No. 18, dated January 19, 1909, as having been made by the witness, stating that: "One view and some of the lettering on this drawing was put on by some one else." The drawing was a general assembly drawing and was to be used for the assembly of the machine. Witness made the tracing from which

the blueprint Exhibit No. 19 was made. Identified it "from all the figures and wording marked on the blue print". Drawing shows the details for the double link machine—the details of the assembly drawings, No. 18—and was used for manufacturing purposes and for a record of the parts that were made up. Witness saw parts of a magneto made in accordance with the drawings No. 17, 18 and 19, and remembered of one machine being made up. Witness took a magneto machine to Milwaukee at the instance of Mr. Milton. Was accompanied by Mr. Kane—did not know Mr. Kane's first name, but he was the man present in the court room when witness was testifying. When they got to Milwaukee they went to the engine plant of the Harvester Company and attached the magneto to an engine. Being shown Exhibit No. 21, and asked if he could identify it as the print the original drawing of which he made, witness said: "I can identify some of the details on this drawing" as having been made by me. Could not say definitely whether it was Mr. Milton or Mr. Webster who sent him to Milwaukee, but at that time he was working under the direction of Mr. Milton. Being asked to identify the various details of the drawings No. 21 which were made by the witness, he said he could not describe them "absolutely" on account of several details have had changed dimensions" and that he had the original paper drawing from which the exhibit was made. Was able to identify the inductor, and some of the lettering on the bracket, and lettering such as the word "reamed" on the figure right above the inductor. Did not recall whether he had ever seen any magnetos which had brackets like that shown in views he had pointed out. Further identified the figure marked "No. 10 wire" as having been made by witness. Asked whether he remembered anything about the making of separate figures, or detailed figures on separate sheets, which were given to the workmen, witness said he remembered making details for brackets and other castings for the machine on paper, Manila paper drawings, which were turned over to the pattern maker from which he made patterns. They were usually mounted on a board and shel-lacked in order to preserve them. When the various parts had been completed by the workmen the drawings would be brought to the drafting room and tracings would be made from them, and they would be all assembled together and one tracing made of the whole mechanism.

879 Being shown Exhibit No. 15 and asked if he remembered having seen any such a machine at the time he was making the figures of the drawing Exhibit No. 21, witness said he did not remember the complete machine, but remembered parts such as the spring, the rods to which the springs were fastened, the bracket—the brass casting connecting the two magnets—and the laminated bars; nothing else. Asked if at various times or frequently he did drafting work in accordance with the instructions of Mr. Milton, witness said he made the details in accordance with Mr. Milton's instructions, and never received instructions from anyone else to make drawings in connection with magneto work. Being asked to describe the usual way in which a draftsman goes to work to make a design and embody it in a drawing, witness said the customary way is to first make a pencil layout on Manila paper, and if the layout is satisfactory a tracing is made from it on tracing paper and blueprints made from the tracing. Being asked whether draftsmen ever employed any other kind of paper or tracing cloth than that which witness had described, witness testified as follows:

“My experience has always been that working with some complicated mechanism if, after you had the pencil arrangement on your Manila drawing, and you wanted to see different movements of certain parts, you would take what was called tracing paper, place it over the drawing, sketch off your parts from that, and if there were different movements that that machine would make you would move this paper to show the different movements. I remember doing that in connection with this magneto work. For instance, taking the details of the inductor, showing the different arrangements and movements of it by making a sketch or laying tracing paper over the drawing and moving this paper around.

The Court: Q I do not understand yet where you get your object from which you make your Manila sketch. Is that from a drawing also?

880 A The Manila paper sketch is made from the ideas, which in this case were given to me by Mr. Milton.

Q Well, given to you on paper?

A On ordinary freehand sketch paper.

The Court: Yes.

Mr. Bulkley: Q Mr. Kroeplin, did you ever get any in-

structions from anybody else other than Milton in connection with what work you had to do in the making of figures or drawings—the figures of Exhibit 21 or in the making of Exhibits 17, 18, 19 and 21?

A I had no instructions from anyone else."

Cross-Examination by Mr. Williams.

Q Do you mean to say it was only Milton's ideas which you embodied in all of these blue prints marked Defendant's Exhibits 17, 18, 19 and 21?

A Yes, sir.

Q Is that true of this Defendants' Exhibit 18, this double link machine?

A I said that I made these three views on this drawing. This view was not made by me.

Q Well, maybe I didn't make myself clear. Who originated, so far as you know, the double link scheme shown in this drawing?

A Mr. Milton.

Q Now, when was it that you made this Defendants' Exhibit No. 21 drawing, or, rather, the original tracing from which this is a blue print?

A I did not make the complete tracing.

Q Well, the part that you made, when did you do that?

A Prior to the sixth month, third day, 1909. I cannot recall the date.

Q How long before that?

881 A I cannot recall.

Q Well, was it within a week before that?

A Oh, it must have been prior to that, months before that, because these details would not be traced for sometime after the parts were made.

Q That is, the parts of the machine, as I understand it, would be made first, and then after that a drawing such as this Exhibit 21 would be made, is that correct?

A Yes, sir.

Q So that you did the drawing after the machine had been made?

A Parts of this tracing were made by me after the parts were made up.

Q After the actual physical—

A Parts.

Q —pieces of apparatus had been made. Can you identify the papers that I now hand you (handing documents to witness)?

A I identify these papers.

Q Will you say, briefly, what they are?

A The first letter is a letter of May 12th to me with reference to the Milton magneto patent. The second is a letter, my letter to you—

Q Dated?

A Dated the 5th month, 15th day, 1916, with reference to the Milton magneto. The third is a letter to me of May 18, 1916, and the fourth a letter of May 20th, my answer to it.

Q May 20, 1916?

A Yes, sir.

Q Did you receive the originals of these letters to you, and mail the original of your letters to Williams, Bradbury & See?

A Yes, sir.

Q In the due course of mail following the dates appearing upon these papers?

A Yes, sir.

882 Mr. Williams: We offer this correspondence in evidence, and ask it be marked as Plaintiff's Exhibit No. 68,—(marked 68a, 68b, and 68c.)

JOHN CRON ANDERSON, called as a witness on behalf of the corporate defendants, testified as follows:

Direct Examination by Mr. Bulkley.

Witness stated that he resided in Chicago, had retired from business and was not engaged in any occupation. Was foundry superintendent for Webster Manufacturing Company for 22 or 23 years prior to 1910, severing his connection with the company at the time it removed from Chicago to Tiffin, Ohio. Knew John L. Milton. Took orders from him in regard to magneto castings. Did not remember the exact time, but it was some time before the removal to Tiffin. No one gave witness orders to receive instructions from Mr. Milton regarding castings. Witness was one of the stockholders of the company and knew the capacity in which Mr. Milton was hired. It was as an expert gas engine man,

hired to get up a magneto. Witness made castings in accordance with his instructions. Could not say definitely how many times, but perhaps twenty-five or fifty times. Witness was opposed to the making of the castings because they interfered with his other work, and so expressed himself to Mr. Milton. Witness thought he might be able to identify some of the castings he made for Mr. Milton. Was shown Exhibit 15 and then Exhibit 12, and said: "Yes, these are very familiar. I think that—I am quite sure that—we made this, both this casting here and this. That is 15 and 12.—That is the bareket on each of them." Witness did not make any castings for magnetos except in accordance with instructions given to him by Mr. Milton, and never heard of anybody by the name Kane while witness was in the employ of the Webster Company. Witness knew Mr. Munn but received no instructions from him regarding castings for magnetos. Asked if Mr. Milton bothered him a good deal about the castings, witness said: "Oh, no. He would come down there perhaps just before the blast went on, or just before we started up, and coax us to get it in that day."

Cross-Examination by Mr. Williams.

The attention of the witness was called to what counsel described as the monogram 'IHC' on Exhibit 15, witness did not know if those were the letters. Identified the number 7380 on the exhibit, and on Exhibit 12, the legend 'G-7384'. Stated that in both instances the numerals, etc. were a part of the pattern from which the castings were made. They were the Webster Company's code numbers for the parts. Witness thought so because they appeared on the castings. Asked if he did not think the International Harvester Company made the castings, he said: "I wouldn't say as to that. I made castings like those for the Milton magneto. I wouldn't say that I made these castings, but I made castings like these for the Milton magneto." Witness could not state exactly when he made them. Witness was with the Webster Company until it moved to Tiffin, in 1910, and afterward. They had made the castings referred to at any time up to the time he left the company.

H. J. PODLESAK, recalled, as a witness on behalf of the corporate defendants, testified as follows:

Direct Examination by Mr. Bulkley.

Witness remembered having had an interview with Mr.

Milton about an engine known as the Merwin engine in 884 the latter part of 1908 or early part of 1909 while witness was in the employ of the Aermoter Company. Asked how he happened to see Mr. Milton on that occasion, witness stated that Mr. Milton or Mr. Webster used to call him down to see anything new or relating to any trouble—when they had something to show him or something to ask him. Had two or three conversations with Mr. Milton about the Merwin engine. Saw the engine running. Asked to state the substance of those conversations, witness said:

“Well, when they first put the magneto on it was one of those—the lever—it wasn’t the unitary structure; and the engine gave quite a lot of trouble. It wouldn’t run at full speed. The thing would shift out of time. And either Mr. Milton or Mr. Webster called me down there—I do not remember who now—and we saw the engine running, had it running.”

The magneto was mounted on the boss of the cylinder. Mr. Milton asked witness whether the Harvester people would be willing to strengthen the casting around that boss, and witness told him they wouldn’t and that it wouldn’t be advisable to do it, but that what they could do was to extend the pad to which the igniter block was fastened and attach the magneto to that. Being shown Defendants’ Exhibit No. 20, witness stated that it represented a cylinder of a horizontal engine with a head bolted to it, and illustrated the igniter opening on the side and an extension of the igniter pad. The Merwin engine was supposed to run at a speed of 450, which was not an unusual speed for that size of engine. Being asked whether any other suggestions were made at any of those conferences in connection with the Merwin engine, and as to how to remedy the defects, witness stated that there were a good many suggestions made, in fact so many that they would probably make half a dozen different kinds of igniter attachments. There was one suggestion made by Mr. 885 Milton, or, rather, he asked witness whether the Harvester people would be willing to extend the flange of the

igniter block so that the magneto bracket could be attached to that instead of being attached to the cylinder itself on the pad.

Cross-Examination by Mr. Williams.

Witness never saw the drawing, Defendants' Exhibit 20 until he saw it on the tables in the court room within a day or two before he testified. It was not present when he had any of the conversations referred to with Mr. Milton. Asked a further question by Mr. Bulkley, witness stated that he knew the engine referred to as the Merwin engine because Mr. Milton told him it was for Mr. Merwin.

Plaintiff's counsel being asked to produce the originals of the four blue prints Defendants' Exhibits 17, 18, 19 and 21, plaintiff's counsel stated to the court that while they were objected to as immaterial, no objection was made to them as being secondary.

JOHN L. MILTON:

Mr. Milton resumed the stand to state that he had examined Plaintiff's Exhibit No. 68, and that he had not found any other letters in his files pertaining to the subject of that correspondence—that the exhibit was the complete file of the correspondence, so far as he knew.

Plaintiff's counsel requested that the several papers or letters constituting Plaintiff's Exhibits 68 and 67 be numbered, respectively, as 68-A, 68-B, 68-C, and so on, and in the other instance, 67-A, B, C and D. It was agreed that copies of the original letters from Mr. Milton's file might be substituted for the originals, the latter to be retained by the witness.

886 Defendants' counsel offered in evidence as Defendants' Exhibit No. 50 a letter from Webster Electric Company to Hood & Schley. Plaintiff's counsel objected to the exhibit as irrelevant and immaterial but admitted its authenticity, Objection overruled and exhibit admitted.

TOWNER K. WEBSTER, recalled for further cross-examination by Mr. Peaks:

Witness stated that he had read the original affidavit of Gerald D. Chiville, sworn to May 12, 1916, before Albert G. McCaleb, notary public, but did not know whether this was the affidavit used in the interference proceedings in the Patent Office between the Kane and Milton patents; did not remember anything about it. Asked if there was anything in the affidavit which he wished to contradict, witness said:

"A. Well, there is one phrase there in which he suggests that I spoke about the kind of a design I wanted made.

Q. Will you please refer to the passage that you have in mind, particularly, and read it out loud?

A. (Reading) 'In the spring of 1909 Mr. T. K. Webster, Sr., the president of the company, asked Mr. Kane and me to see if we could not design unitary structure by which the spark plug carrying the contact, and also the inductor generator, could be mounted together on a single support, so that they could be removed from the engine, and replaced, without affecting the adjustment between them.

Q. Yes.

A. I certainly did not speak anything about a unitary design. I know the whole thought in my mind was at that time that here was rather a desperate situation, and Kane had been out on the road and seen the troubles. Mr. Chiville was working in that department; and I remember distinctly 887 going up there, and saying, 'Now, here, boys, I will offer a prize for the best design to remedy these troubles.'

Q. And you say that what Mr. Chiville says about it in that affidavit is not true?

A. I say it is incorrect."

The affidavit referred to by the witness was Defendant's Exhibit 46.

Plaintiff's counsel offered in evidence the sample of Defendant's Machine Type B, which was referred to during the examination of previous witnesses but not formally offered in evidence, and the same was marked Plaintiff's Exhibit No. 69.

HENRY W. CARTER called as a witness on behalf of the corporate defendants testified as follows:

Direct Examination by Mr. Mason.

Age 52; residence Chicago; mechanical engineer and patent expert. Plaintiff's counsel admitted the competency of the witness to testify as an expert in connection with the devices involved in this case. Witness stated that he was familiar with the Kane patent in suit and had read the testimony of plaintiff's expert witness, H. B. Webster, with regard to the alleged improvement shown in the patent and particularly pointed out in claims 2, 3, 7 and 8. Witness stated he had also examined the old Milton magneto mechanism, Plaintiff's Exhibit No. 11, and the later Milton magneto mechanism, Plaintiff's Exhibit No. 12; also plaintiff's commercial magneto mechanism exemplified by Plaintiff's Exhibits Nos. 43-48, and Defendant's Types A, B and C and previously offered in evidence; following which the witness testified as follows:

888 In speaking of the Kane patent, Mr. Webster, among other things:

'The problem, therefore, with which Mr. Kane seems to have been confronted in his efforts to improve the old style magneto involved, whether he recognized it or not, what might be called a sort of 3-point synchronism; in other words, to use that oscillating magneto and a make and break igniter to its full advantage, it is necessary that the contact electrodes must be separated at a pretty definite time with regard to the cycle of the engine, and that the current impulse produced by the magneto generator must occur at almost the exact instance at which the contact electrodes are separated; the spark must be timed in respect to the engine, and the oscillating of the rotor must be timed with respect to the separation of the spark contacts.'

I will ask you to state whether there was anything new at that date, in recognizing the attributes thus recited as being embodied in an oscillating magneto equipped for an internal combustion engine?

A Not at all. Those attributes were perfectly understood, and fully set forth in the old art, and the solution of them was not peculiar at all to the unitary device which is involved in this alleged Kane invention. Moreover, the unitary device

does not solve all the problems, or possess all the attributes, as, for instance, that in regard to the accuracy of firing with respect to the movement of the piston; that is not a matter which is particularly helped by the unitary construction, at all. And, as for the so-called problem of obtaining a synchronism of the inductor or rotor of the magneto, relatively to the time when the electrodes separate to make the spark, that not only was recognized as a necessity of all such apparatuses before this time, but it is simply a matter of good workmanship and ordinary common sense in mechanical design, whether you get it in a two-piece structure, or in a one-piece structure; that is to say, it is perfectly possible to get it in a device that is not unitary; and there are many engines in use today that use the two piece structures. The International Harvester Company's engines, as made today, for example, do not use the unitary bracket at all; they use the same old two-piece structure in certain lines of their engines that was used prior to this invention; I do not mean the same, exact device, but I mean to say that a two-piece structure, as distinguished from the one-piece structure,—a separate mounting of the magneto on the engine, as distinguished from mounting the magneto on the plug. In another of their engines they use the rotary type. But in none of their engines as offered for sale today do they use the one-piece structure, or do they mount their magneto on the plug; they simply gave up that device, or that so-called improvement, which has been testified as being made for their particular benefit back there in 1909, and have gone back to the old two-piece construction. I speak of that simply as showing that this so-called problem was not inherent at all, or did not exist at all, so far as the broad proposition of the two-piece structure, as distinguished from the one-piece structure, is concerned.

Mr. Williams: Let me interpose an objection as to the testimony of the witness, as to what the International Harvester Company may now do, on the ground that it is incompetent. When I offered to admit that Mr. Carter was qualified, it was as an expert to express opinions, and not to testify to a fact; and he has not shown a basis for any testimony as to the fact.

The Court: He is merely giving it by way of illustration of his idea. I think it may stand.

(Exception)

A (Continuing) As showing the entire, complete recog-

dition of these peculiar attributes that Mr. Webster has 890 referred to in connection with this so-called Kane invention, I would call particular attention to the Weber patent No. 820,535, of May 15, 1906.

Without stopping to go into the details of this mechanism, at this point, I would simply point out that the device shown in this patent is an electric igniter for explosive engines of the same general character as the devices which have been heretofore considered, and as the device which is shown in the Kane patent in suit; and then would call attention to several statements made on page 3 of the specification, in the last column; thus reading, beginning at line 87, the patent states:

"The crank arms 26 and 41 are so adjusted upon their respective shafts that the screw 27 will be struck by the crank hammer arm 41 at a time when the current generated in the circuit will be near its maximum strength."

Agtn, in the following sentence:

"The hammer arm 41 striking the anvil mechanism, consisting of the screw 27 and the crank arm 26, will cause the electric rock electrode—rock shaft 24 to oscillate, so as to separate the electrodes 5 and 25 at the time when the strength of the electric current in the circuit is at its maximum strength."

Now, here you have pointed out in this old Weber patent exactly what Mr. Webster has called attention to, that is, the necessity of having the rotor of the magneto and the moveable arm of the electrode so related and adjusted to each other that the hammer blow which the movement of the rotor applies to the moveable electrode to separate the contacts will occur at just the time when the current generated by the rotor is at its maximum.

Now, that is an entirely separate and distinct thing from the other requirement of synchronism, the other requirement of the three-point synchronism, as used in Mr. Webster's expression, which is the synchronism between the engine 891 and the time when the magneto is tripped,—the synchronism which determines when the spark shall be produced in the cycle of the engine, or in the movement of the engine piston.

Now, this, again, is set out in the Weber patent here, beginning for example, at line 114, where the statement reads as follows:

"After the engine has begun to run at its regular speed,

the adjustment of the time for producing the spark between the electrodes 5 and 25 may be obtained with great exactness, so that the charge may be fired at the exact time required for the greatest efficiency."

Again, at line 126, the statement occurs:

"It will be understood that if the engine is to be run at a rapid speed, it is necessary to fire the charge sooner than when the engine is running at a slower speed; so, when it is desired to increase the speed of the engine to secure the greatest efficiency from the expansive force of the charge in the cylinder, it becomes necessary to fire the charge earlier. This may be done as described while the engine is running, by turning the screw 45 in the proper direction to advance the plate 42 toward the arm 65, after which the screw 44 is tightened to preserve the adjustment obtained.

"Anyone versed in the art will understand the great advantage of being able to adjust the time of firing the charge while the engine is running at its regular working speed, as at this time the operator can exactly determine the proper time for producing the firing spark."

There are other patents besides the Webster patent which make reference to this same necessity of having the synchronism necessary,—and it may be said that from the earliest time of the magneto art, this thing has been recognized.

892 Mr. Mason: Q It seems to have been assumed by Mr.

Webster that the structure set forth in the Kane patent, in which the magneto is mounted on the plug, necessarily eliminated the difficulties with respect to both features of the so-called 3-point synchronism, in other words, the timing of the spark with respect to the cycle of the engine, on the one hand, and the timing of the separation of the electrodes at which the spark is produced, with respect to the oscillation of the inductor, so as to generate the spark at the moment the current curve is highest, on the other hand. Have you any further comment to make on this situation?

A Simply to repeat, that these two points or two sections or parts of the so-called 3-point synchronism have no necessary relation to each other at all. The commercial devices here in the court room, particularly the defendants' and plaintiff's unitary structures, show that these devices separated from the engine and operated by the hand contain in themselves the synchronism between the opening of electrodes and the movement of the rotor, so as to produce a fat spark, the maximum spark of which the device is capable, and they

will produce it just the same, whether it is worked with your hands, or is worked by the engine, whether it is on the engine or off the engine, and no matter what time in the cycle of the engine the spark is given, the spark itself will be produced, just the same. In other words, this sparking mechanism is independent completely of the question of what time in the movement of the engine the spark is produced. Just so, the mounting of it, the mounting of the device, the mounting of the magneto, as a unitary mechanism with the plug, the making of it a one-piece structure, has no particular effect on the question of the accuracy of timing, as to the production of the spark at the right moment in the cycle of the engine. The same shifting about of the device, the unitary device, which was objected to in the old Milton magneto structures, of

Plaintiff's Exhibit No. 11, if it occurs with the unitary device, will throw the timing of the engine out, just the same as it would with the other, with the old devices; that is to say, if you permit your unitary structure to rock in its attachment to the engine, so as to change the distance between the trip arm and the push rod of the engine, the throwing out of the timing will occur just the same in the one case as in the other, that is, just the same whether you have the one-piece unitary device as when you have the old two-piece device.

And this is brought out particularly in the Podlesak re-issue patent in suit, where one of the features of the invention which Mr. Webster has called attention to consists in fastening the one piece structure so accurately on the engine that it will be prevented from rocking.

The Podlesak specification, which relates entirely to the one piece structure, sets forth, in its opening paragraph, quite at length, this very problem of the necessity of holding the magneto rigidly to the engine in order to prevent interruption or mal-adjustment in the timing of the spark with reference to the cycle of the engine. And one portion of the invention claimed in that Podlesak re-issue patent is a structure by which this is prevented.—The structure which involves what Mr. Webster referred to as the dowel pin proposition.

Q The Podlesak patent to which you referred was the re-issue patent 13,878 in suit, was it not (showing a paper to the witness)?

A Yes. And I will quote from the paragraph of the specification to which I refer, beginning at line 38 of page 1:

"The actuating means for rotor and moveable electrode is mounted on the engine cylinder or other suitable part, and is operatively connected with some moving mechanism, and has no connection with the magneto or igniter, since the actuator, which may be a push rod rotating, or oscillatory arm, or the like, merely contracts with the trip finger of the 894 rotor. As the igniter and generator must be removed from time to time for cleaning the electrodes, and other reasons, it is of great importance that the igniter and generator be replaced in exactly the same position it was before the removal, otherwise the push rod will not be disposed in proper relation to the trip finger of the rotor to accomplish satisfactory results in the operation of the engine, generator and igniter. The reason for this liability of the igniter being replaced in a different position from that which is originally occupied, when all the operating parts were adjusted to accomplish the best results, is due to the fact that the holes in the body of the igniter for receiving the bolts or fastening studs are made larger than the bolts or studs, as is also the opening in the engine cylinder for receiving the body of the igniter, this "latitude" between the parts being provided so as to facilitate easy removal and to obviate the necessity of careful and extensive machining and fitting of the parts by reason of the liability to error in replacing the igniter; there is provided an arm or equivalent means on the igniter body to inter-engage with a fixed part on the engine cylinder, so that there can be but one position in which the igniter can be attached to the cylinder, and that position is the one where the push rod or other actuator is in proper relation to the trip finger of the rotor."

So far as this improvement is concerned, it will be obvious, I think, that the improvement would be just as applicable and the difficulties referred to are the same, if the magneto is mounted separately from the plug. Here it is simply a question of the relation of the trip finger to the push rod, and that relation must be maintained in order to obtain nicety of firing, whether the magneto is a separate unit, or is in one unit with the plug.

Referring to Exhibit No. 11—A, is it?

895 Mr. Mason: Eleven, I think.

Mr. Williams: Eleven.

The Court: Well, that is the—

A The old Milton magneto (indicating).

The Court: The old Milton magneto.

A —in comparison with Exhibit 12—These are plaintiff's exhibits—the magneto has been identified as that of the Kane patent—it will be clear that what Mr. Podlesak was talking about in his specification applies equally as well to the one as to the other. If this rocks (indicating)—and by "this" I have reference to 12,—the unitary structure,—if this rocks, as he points out, the distance between the push rod and the trip finger of the magneto is changed, and consequently the magneto will not be fired at the same spot in the revolution of the engine that it was before; and this is just the same situation which was developed, and has been testified to, with regard to the old Milton magneto, Exhibit 11, both the making of the device unitary, or in two parts, has no particular bearing on this third point of the so-called three-point synchronism referred to by Mr. Webster.

Mr. Mason: Q I will now ask you to compare the structure of the Kane patent in suit, as set forth in claims 2, 3, 7 and 8, with the analogous structure of the prior art, calling your attention particularly to the old Milton magneto, as exemplified Exhibit No. 11, to the Milton patent No. 1053107, filed January 30, 1909, and to the following prior patents: Weber, 820,535, dated May 15, 1906; Wattles 909,264, dated January 12, 1909; and Hennig 916,312 dated March 23, 1909.

A The magneto of the Kane patent in suit, exemplified by Plaintiff's Exhibit 12, and also exemplified by the demonstrating device, Plaintiff's Exhibit 47, so far as its magneto structure is concerned, is obviously almost identical with the old Milton patent.

896 Q What exhibit have you there, Mr. Carter, with that old Milton magneto?

A Plaintiff's Exhibit 11. The difference between the two structures exists in respect to the relative arrangement as between the magneto and the plug, that is to say, the old Milton magneto was a two-piece structure, the plug being entirely separate, and the new Milton magneto, exemplifying the device of the Kane patent in suit, is one in which the magneto is mounted on the plug, where you have a one-piece casting, which includes the plug, and the support for the magneto.

Now, this idea of mounting the magneto on the plug was disclosed in the Weber patent, No. 820,535, to which I have already called attention.

The Court: What figure? What figure of the patent shows that?

A Figure one and figure seven; figures one and seven perhaps show this most clearly. There is just one distinction which should be drawn here, and that is that while the magneto body, the magnets, rotor, the so-called yoke or hammer part of the rotor, the electrodes, including the moveable electrodes, are all mounted together as one part, one unitary structure; the spring which shoots the magneto, or shoots the inductor or rotor, so to speak, is not in this connection, on that same bracket. I will call attention to this detail a little further, later, and comment on its bearing; but just at this moment I would call attention particularly to the general construction, and in doing so I would like to use a model which I have had prepared here, and which I identify as substantially involving the disclosure of the Weber patent, as I understand it.

(The witness produces a model, and indicates on same).

In this model it will be observed that the magneto proper is in one unit with the plug, not by reason of an integral casting of the plug, but by reason of the fact that the shelf 897 on which the magneto is mounted is rigidly secured to the plug, or to the flange of the plug, and this enables the device to be taken off and put on as a single unit, including the electrodes, and the rotor, or inductor, and the hammer arm, which corresponds to the yoke arm of the Kane patent. The one thing lacking, as to the magneto equipment, now, is the spring.

The Court: Q You mean the yoke spring?

A Yes.

Q The heavy spring?

A The heavy spring of the magneto, which is designated fifty in the Weber patent, and which is, as I have already pointed out, mounted on a separate bracket in the Weber structure.

Now, so far as any synchronism is concerned, involved in the production of the spark at the precise time when the current strength is highest, or is at its height,—is at its maximum, this device is as perfectly synchronized as any of the devices here that are said to involve the claims of the patent in suit, whether plaintiff's or defendants' construction. In other words, the relation of the movable electrode, with its operating arm, and light spring, is maintained here (indicating) just as permanently—I should have said, the relation to the rotor, and to the hammer arm of the rotor, is maintained

here just as permanently as in the Kane patent or in any of the devices of the plaintiff's or defendants', which are alleged to be claimed under the Kane patent. And this device, being taken off, can be tested for a spark, in the same way as the other devices.

Your Honor will see, as I operate it, that the spark is produced (illustrating) exactly as is the case with the devices of plaintiff and defendants that are charged with embodying the Kane invention.

Mr. Williams: Q Would you do that again, please? Will you do so where I can see what you are doing?

898 A I simply pull on this lever (indicating).

Mr. Mason: Q Won't you state a little more fully just what you did Mr. Carter?

A I placed my thumb on the lever 40, which is the hammer member connected with the rotor, the part which corresponds with the yoke in the Kane patent in that respect, and by giving it a twitch,—strike the moveable electrode, at the same time of course giving a twist to the rotor element to generate the current, and when the lever 40 in its movement strikes the arm of the moveable electrode, why, it operates exactly as it operates in the complete device, or as any of these devices do; it separates the electrodes at the time that the current is being generated by the rotor.

Q May I interject a question just there? You do, then, substantially what is done by the springs, when you do that,—by the spring, I mean, in the actual operation of the device?

A By the spring 50.

Q The big spring, I mean.

A Yes. I simply do with my hand what is done by spring 50 in the actual operation.

(Witness illustrates.)

Now I have replaced the magneto and ignition block on the frame work which corresponds with the engine cylinder, and by operating this push rod, your Honor will see that the spark is generated just as in all of these other devices.

My view of the matter of this Weber patent, therefore, is that here we have a complete disclosure of the essential proposition of mounting the magneto on the plug so as to make a unitary device of the magneto and the electrode mechanism carried by the plug, and so that the device can be taken off and put back, and the electrodes cleaned, without

affecting or changing any of the adjustments in the magneto itself. The only difference, as I pointed out, is, here, that the heavy spring, which in practice shoots the magneto, is in this Weber patent mounted on a separate bracket, shown at 49 in the Weber patent—in the Weber drawings; and this difference, while it is practically of, and is a difference which in practical commercial—which, as a practical commercial consideration would undoubtedly be of some importance, does not in the least interfere with the permanency of the synchronism, which Mr. Webster has pointed out, has regarded as peculiar to the Kane improvement, that is, the synchronism between the rotor and the moveable electrode, which produced the separation of the electrodes and the generation of the spark, at the time when the current curve is highest. That idea is as perfectly disclosed here as it could be, if the spring were built in as a part of the magneto itself; and this brings me further to state the conclusion, that this question of whether the spring is a part of the magneto, or is separate from it is not a question at all of unitary or non-unitary structure; it is simply a question of the character of magneto device that is selected. If, for example, the magneto here, instead of being one in which the spring was a part of the connecting rod, if the magneto selected was any of the old magnetos, like the old Milton magneto, or the old magneto of the patent to Hennig. If either of these old magnetos were mounted on the shelf here, were bolted on the shelf of the Weber patent, in place of the magneto, the style of magneto which Weber actually shows then without any change whatever, without any change in mode of operation whatever, the device would not only have the unitary features as to the magneto proper, and the ignition block, but would have the self contained spring arrangement; in other words, the proposition of building a magneto with a self contained spring, so that the magneto carried the spring with it wherever it was moved, was common in the art, and it simply happens that Weber did not in his showing select that type of magneto. This type of magneto is shown on—

The Court: Fig. 2.

A Fig. 2 of the Hennig patent, and is shown in the old Milton magneto patent of 1909, Figure 2. I refer to Milton patent No. 1,053,107; this patent was issued several years later, but was filed January 30, 1909, and it substantially

shows the device which has been offered in evidence as Plaintiff's Exhibit No. 11, the old Milton magneto structure. I do not mean it shows all the details of it, but it is substantially the device of the patent.

Now, with regard to this device of the Weber patent, I wish to state that my authority for the bolting of the shelf directly to the plug, I mean the shelf which supports the magneto, is particularly taken from the paragraph beginning at line 17 of page 4, which reads as follows:

'In order that the crank arm 26 and the hammer arm 41 may hold their relative positions with respect to each other intact, I prefer to mount the plate or board 13 upon a horizontal bracket 53, the inner end of which is provided with a vertical flange 54, secured rigidly to the igniter block 3.'

I wish particularly to emphasize those words, 'secured rigidly to the igniter block 3.' Now, the drawing, or the specification does not particularly state what it is that secures this up-turned flange 54 of the shelf 53 to the igniter block 3; it simply states that it is rigidly secured, and the drawing shows the heads of two bolts, particularly, in Figs. 1 and 3; and from the description I understand that those bolts go through the shelf into the igniter block, and secure those two parts rigidly together. That is all the description there is as to this particular feature of the construction.

901 'Except that the same paragraph proceeds to state that the igniter block 3, which is such as are commonly used in engines of this type, may be sent, together with the magneto electric machine, and some of the parts connected therewith, and fitted to an engine, in lieu of a similar igniter block provided with another sparking mechanism.'

The fact that this paragraph not only states that these two parts, that is, the shelf and the igniter block are rigidly secured together, but states the reason for it, to-wit: in order that the crank arm 26, which is the arm corresponding with the yoke of the Kane patent, and the hammer arm 41—I have got that just reversed—the crank arm 26 is the moveable electrode, and the hammer arm 41 is the one which corresponds with the yoke of the Kane patent,—in order that these parts may hold their relative positions with respect to each other intact.

Now, that is exactly the reason which has been set forth here as the reason for making the unitary bracket structure of the patent in suit,—the necessity of maintaining intact

these relative positions of these parts, so that if you took the device off, you would not disturb it. That is set forth in so many words in this Weber patent.

Now, perhaps I should say with respect to this feature of the Weber construction, that is, the rigid securing of the shelf to the igniter block, that I know that the view was advanced before the Patent Office that these bolts, the heads of which are shown in Fig. 3 and in Fig. 1, and which I have assumed to be the members which rigidly unite the shelf to the igniter block, do not screw into the igniter block, but pass loosely through holes in the igniter block, and actually have their connection, their screw connection, in the cylinder of the engine, back of the igniter block.

902 There is nothing in the drawing which could lead one to conclude one way or the other with regard to this point; and there is no definite statement in the specification with regard to it, I mean with regard to exactly where, in what part, the screw thread is placed; but I wish to state that in my judgment the view is untenable, that is, the view that the bolts refer to do not really unite the igniter block and shelf, but unite the cylinder and shelf,—the igniter block simply being a space block that happens to intervene between them. That view in my judgment is untenable, in view of the express language of the specification here which states that it is the shelf, through its horizontal flange,—the shelf which is rigidly secured, not to the engine cylinder, but to the igniter block; and in view of the statement of the reason for doing this, that is, the maintenance of the parts, the hammer arm and crank arm, the parts of the magneto, and the moveable electrodes, intact, as to their relative positions. Now, to my mind it is absurd to talk about that maintenance of those positions intact as meaning only intact where they are on the engine; of course they remain intact when they are on the engine, as long as the bolts are tight; it is when you take them off the engine that the danger of separating them is met with; and the statement of this requirement, that they be kept intact,—in connection with the statement that they are kept intact by reason of the fact that the magneto supporting shelf is rigidly secured not to the engine cylinder but to the igniter block, gives no possibility for any other reasonable construction in my judgment than that the bolts at this point unite the magneto supporting shelf directly to the

igniter block, so that they come off and go back together as a unit.

903 The Court: Q Is figure three in the Weber patent the only place where this shelf is shown?

A No, Your Honor, It is shown—well, just a moment. The shelf is shown also in Fig. 4.

The Court: Yes.

A The shelf is 53.

The Court: 53.

A And in Figs. 7 and 8. I do not know that there is any other showing here that throws any light on that particular proposition. Fig. 2, which is a rear view of the igniter block, or an inside view of the igniter block, a back view,—shows holes there, or indicates holes opposite the positions of the screws, but that would be the natural construction, the natural way of machining them.

Your Honor will see that the same thing is true of this model, regardless of whether those holes are threaded holes, which the screws engaged, or were smooth holes which the screws simply passed through to engage the cylinder,—the natural way to make the hole in such a piece is to run it right through; and that this is true is further indicated by the fact that at the left hand side of this Fig. 2 your Honor will observe what looks like a hole there half way up the block, which is the hole corresponding to this pin 30,—that holds the spring, and which under no circumstances could or would extend through into the cylinder,—the showing of hole there is as unnecessary as the showing of the hole below. That is, it would not be absolutely necessary to have any of these holes bored clear through, but of is the natural way for the mechanic to do, is simply to slap a hole right through there, the thickest part in it.

904 I may say with regard to pin thirty that the model shows it correctly where it is a straight pin, but that is a detail that has no bearing upon the comparisons, and is due to the fact that the model maker for convenience has adapted a commercial form of block, or igniter block, similar in form to the one which has been introduced by the plaintiff as the Fairbanks-Morse Igniter Block.

Can you give me that exhibit, the Fairbanks-Morse Igniter Block?

The igniter block which the model maker used for convenience is simply the one that is used on defendants' structure

which is introduced in evidence as Plaintiff's Exhibit, Defendant's machine, Type B. This igniter block being of a little smaller size than the relative proportions shown in the Weber Patent it is necessary to curve that pin out there.

This explains also why the bolt which holds the igniter block in place is shown as going through a slot instead of through a round hole. That has nothing to do with the situation except that it happened to be convenient to use that form of igniter block.

I think that is all that is necessary to say with regard to this Weber patent and model.

I would next call attention to the Wattles patent, 909,264, dated January 12, 1909.

I call attention to this patent more particularly for the purpose of showing another instance in the old art of the unitary magneto and bracket structure. I meant the unitary magneto and plug structure, unitary ignition block and magneto ignition plug in this case, which has a direct screw thread engagement with the cylinder which is like the ordinary spark plug in an automobile engine.

905 This is particularly well shown in Fig. 2 and 3. The magneto, it will be noted, is clamped by the bracket 26 on an extension of the plug.

Now the Wattles type of magneto was not a desirable type. It was not operated by the movement of the engine, but by the pressure of the gases in the engine.

It had a piston which is shown in 19, Fig. 5 and also shown in Fig. 6, that was moved by the pressure of the gases in the cylinder. That is the compression raised the pressure within the cylinder and it moved this piston which was connected with the magneto roto so as to snap it around; and there was a tripping mechanism for determining the exact timing of the release, which included the cam and connecting rod arrangement shown in Fig. 1.

I do not think it is necessary to go into the details of that mechanism. As I said I do not regard it as a desirable type of magneto and it appears never to have been developed as a satisfactory commercial structure. But I refer to it simply as showing that the idea of making the magneto support and the ignition block a single unit, so that they could be taken out and replaced together was disclosed in this Wattles patent.

The Court: Did you ever see the Weber magneto?

The Witness: No, Your Honor, I never did.

But to illustrate this so that the Court may understand the construction of this Wattles magneto, I produce one which is somewhat different in its detail from that shown in the

Wattles patent in suit to which I have called attention.

906 I know nothing about this device except that it has the

Wattles plate on it, except that it has got the plunger, the piston, for operating the magneto, the pressure of the gases within the engine serving to turn the magneto and to separate the electrodes at the proper point.

Now, in this particular device, the ignition block instead of being screwed in is bolted on, and that is the way that is more ordinarily followed in stationary engines. There are some attachments on this magneto; this particular spring attachment at the end, for determining the time is different from the patent to which I have called attention, I simply show it as illustrating the general type of device shown in that Wattles patent.

The Court: The gas operates on this piston here?

The Witness: Yes, the gases operating on that would move the rotor and separate the electrodes.

I may be able to operate this thing. Your Honor will observe that I produced a spark with this Wattles magneto by reaching in with a pencil, and moving the piston by hand. It would, however, be impossible with this particular device shown in the earlier Wattles patent to push the piston that way because the connection between the interior of the cylinder through which the pressure was admitted was not a straight hole in this device; and if this Wattles magneto of No. 909,264 were operated in that way to produce the spark it would have to be worked with the thumb somewhat as I worked that Weber device when taken off the frame on which it is mounted.

As I say the Wattles model simply shows in a general way the character of the device which was shown in this earlier Wattles patent.

907 Now, with regard to the claims of the Kane patent in suit—

Mr. Mason: Just before you leave that I would like to ask if that last Wattles is not substantially like this Wattles patent 990,935?

The Court: The Wattles Model?

Mr. Mason: The Wattles Model.

The Witness: The Wattles model is like 990,935 of May 2, 1911.

Now, with regard to the claims of the Kane patent in suit, claims 2 and 3 are very specific, but in the main read accurately on the old Milton structure, with the exception of the fact that the old Milton structure did not show the yoke as adapted to engage the push finger directly; that is to say there was a separation in the old Milton magneto between the push finger which is the operating part or arm of the electrode and the yoke of the magneto.

This is shown by Exhibits 11 and 11-A.

Now, the difference between claims 2 and 3, except as to the matter of detail which I shall refer to directly, is particularly that the yoke in the new device directly contacts with the so-called push finger of the moveable electrode, the crank arm referred to in another place, this crank arm (indicating) instead of operating it through a long connection.

Claims 7 and 8 are claims which practically leave out all of the structural details which are contained in Fig. 2—

The Court: Claim ?

The Witness: Claims 2 and 3, and set forth broadly 908 the mounting of the magneto as a whole on the integral support as a rigid unitary structure.

The comparison with the prior art, therefore,—first I should say that these claims 7 and 8 do bring in the fact that the spring, the heavy spring for operating the inductor, or rotor, is mounted on the unitary support with the rest of the magneto.

And that I think is the only distinction between claims 7 and 8 and the Weber patent, except as to this word “integrally”. And for the purpose of this particular comparison I do not see that it makes any difference whether you have an integral casting there or have the two parts rigidly secured together.

In other words the only real distinction between claims 7 and 8, if there is any real distinction, is with respect to the question whether the spring which operated the rotor is also mounted with the rest of the magneto on the unitary support.

And this difference, it seems to me, in view of the fact that it was already characteristic of the old Milton magneto, to mount the springs in just this manner, and characteristic of the Hennig patent that I have called attention to, his mag-

neto and that was old and had nothing to do with the question of unitary support and I should not regard this difference as material or substantial.

The specific structure detailed by claims 2 and 3 of course is not found in Weber. It is found as I pointed out in the old Milton structure, in the old Milton magneto, of the old Milton patent, in Plaintiff's Exhibit 11; but not in connection with the direct engagement of the moveable electrode arm by the hammer yoke on the rotor.

909 This, Your Honor, involves simply substitution, to bring in this feature, bodily substitution of the old Milton magneto for the Weber on the same yoke.

Your Honor will see from this Exhibit 11, Plaintiff's Exhibit 11, that this bracket which supports the magneto is a shelf which corresponds, I may say, to the Weber shelf 53, if this magneto here were unbolted, the proportions being proper, and bolted on to the Weber shelf—then we would have the complete structure so far as that is concerned, and there would need to be no other changes made whatever in order to have the complete operative structure with that substitution, of course the mechanical proportions being proper so as to permit the substitution.

Just so with regard to the Wattles patent, if the old Milton magneto were substituted for the Wattles magneto and operated just as the old Milton magnetoes were operated, but simply mounting it on a unitary bracket, why the device of the Kane patent in suit would then be produced.

These changes I might say I regard as simply matters of mechanical skill, and obviously possible.

Q In that old Wattles construction, shown in that patent 909,264, whatever relation there may be between the movement of the electrodes and the movement of the armature or rotor of the magneto, is that preserved when you take it off and put it on again?

A Yes, I should have pointed that out, that the taking of the device off the engine or of putting it back on does not disturb the relation between the armature rotor and the moveable electrode.

910 That is illustrated by the Wattles model. It would be the same with the old Wattles patent as with the new.

Q I call your attention to certain battery ignition devices in gasoline engines as shown in the following patents: Dick-

inson 754,283, dated March 8, 1904; Cooper, 773,062 dated October 25, 1904; and Olds, 635,506, dated October 24, 1899.

Will you compare these types briefly with the Kane patent in suit and its claims.

A These three patents show battery ignition devices. They do not of course have any magneto connected with them. They simply have mounted on the plug, and unitary with it, a support for the operating mechanism, by which the making and the breaking of the contacts to produce the spark is brought about.

In other words they are generally speaking just such devices as defendants' mechanism is when the magneto is unbolted from it and it is used as a battery device—perhaps it has not been explained to Your Honor—

The Court: No.

The Witness: With the defendant's construction one of its peculiarities in which it differs from the Kane patent in suit, and from the Podelsak patent, and from the plaintiff's structure, is that in the defendant's device the magneto might be unbolted and taken off and then a connection is made with the battery, and usually the kick coil is associated with the battery, the device will work then without any change whatever, that is without any change in the alternating connection, as a battery ignition device. If for instance the magneto gets out of order, or you went to recharge the magneto or make any repairs on it or anything of that kind, all you have to do is to take it off, hitch the battery on here (indicating) and then the device will work without any change whatever as a battery ignition device.

I do not know that it is worth while to go into the details of these three patents. They simply show different styles of battery ignition devices which correspond with plaintiff's exhibit, defendants' machine type A when the magneto is removed from it; and they show devices to which a magneto might be applied just as a magneto can be applied here. When I say here I mean to plaintiff's exhibit, defendants' machine.

Of course, there is nothing in these patents that refers to the magneto or states that there is any change of that kind contemplated.

But the analogy in respect to the ignition unit between what these patents of Cooper, Dickinson and Olds show, and the device of the Kane patent in suit, is brought out by this

plaintiff's Exhibit, defendants' machine Type A, without the magneto.

The Court: I don't understand how you did that with the battery in the absence of the push rod.

A The push rod is unchanged, Your Honor. All of that is unchanged.

The Court: Nothing changed there?

A Nothing changed except to take off the magneto and connect the wire for the battery.

I perhaps should have stated in this connection that in each of these devices of the Dickinson, Cooper and Olds patents that this question relates to, there is a push rod and the

trip finger and all of the necessary mechanism, including the springs, just as there is in this plaintiff's exhibit defendants' type A machine, for having the spring tripping and a hammering apart of the contacts, at the right time to produce the spark to cause the explosion.

The Court: Why is battery ignition unsatisfactory in this type of engine for firing stationary engines?

A Simply because you have to keep constantly replacing your batteries.

The Court: It takes more current?

A I would not say it takes more current but you would have to buy more batteries.

The Court: You have to do that in any system.

A Yes, but that is just it. This magneto system makes the engine supply its own current and you have never to pay any attention to the question of whether your battery is working.

The Court: Of course I understand that.

The Witness: There are a great many engines working by battery.

The Court: Stationary engines?

The Witness: Probably many more than working the other way.

The Court: Those are generally storage batteries, dry batteries.

The Witness: Dry batteries.

Mr. Williams: I want to interpose this objection to this testimony relating to the scope or validity of the claims of the Kane patent on the ground that the testimony is inadmissible under the defense which is made as to the rights of

the defendants under that patent, because of some matters of contract relationship.

913 They have set up a defense which would, it seems to me, estop them to make any defense on the ground either of scope or validity.

The Court: It may be admitted subject to the objection.

Mr. Mason: Q Plaintiff's expert, Mr. Webster, has attempted to identify defendants' type A device with claim 3 of the patent in suit, and defendants' type B device with claims 2 and 3 of the patent in suit. Will you compare these types, the A and B devices, with these claims of the patent in suit and state your conclusion?

A I am unable to find in Defendants type A device the structure, combination, set forth in Claim 3 of the Kane patent in suit as contended by Mr. Webster, for the reason that the claim distinctly and definitely calls for its main actuating springs to be connected at one end with the field magnet frame, and for the reason that it definitely calls for the integral yoke member to be rigidly connected with the inductor, neither of which characteristics is true of Defendants' type A device.

Referring to the exhibits of the Kane structure, Plaintiff's Exhibit 11 and 47, it will be observed that the main actuating springs are, as these claims set forth, connected at one end with the field magnet frame, that is, with pins that extent out from the field magnet frame, and it will also be observed that the yoke member is rigid with the inductor. It is pinned right to the inductor shaft, so that the two move absolutely together as one rotating part.

914 Now, those are the definite requirements of the claim, and neither of them is, as I have said, responded to by Defendants' type A device.

On the contrary, in Defendants' type A device the magneto frame, the field magnet frame, is entirely separate and can be removed, and has been removed, from plaintiff's Exhibit of Defendants' type A machine, and yet both the heavy springs and the yoke remain.

I should have said that in moving the field magnet frame the whole of the magnet proper, including the inductor and its shaft, has been taken off.

Now, if this were done with the Kane device, that is if these parts, the inductor and the field magnet frame, were removed it would take away the entire device so far as any operative

structure is concerned, and it would destroy the device, and simply because of the character of structure which the claim specifies the defendant, by making its yoke an entirely separate part, disconnected in every way, except by a pin and slot operative connection, from the inductor, as distinguished from being rigid with it, as the claim requires, and my mounting the springs entirely separate from the magneto proper and from the field magnet frame, has provided a structure which remains operative and a perfect working device for battery ignition purposes when the magneto is taken off.

The distinctions which I have pointed out, therefore, are not merely formal distinctions or immaterial ones, but are distinctions which involve an entirely new function and mode of operation, and which have been set forth, I find, in a later patent issued to Van Deventer, No. 1,236,790, of August 14, 1917.

915 It may, furthermore, be pointed out in regard to this Defendants' Exhibit A, or this Plaintiff's Exhibit of Defendants' machine type A, that there is nothing in the nature of a cam between the—as an engaging surface between the yoke and the operating arm of the movable electrode.

With regard to that cam surface—it is called a curved cam surface in claim 2 and in the specification—the patent points out very elaborately, beginning at line 75, or 74, of page 2—no, that is the wrong place.

Mr. Mason: Line 105, I think, Mr. Carter, of that same page.

The Witness: Will you cut out the words “very elaborately,” please.

The patent points out, line 105 of claim—of page 2—

The Court: Make that just “simply describe” and not “elaborately”; not “very elaborately describe.”

The Witness: That the portion of member 30, which engages the bottom of the anvil 29, is preferably rounded or curved in order to effect uniform movement of the arm 27 during the time the member 30 is in contact with the anvil 29.

This has reference to the rounded end of the arm which is supposed to produce an easing of the engagement of the electrodes. I find nothing of that kind in the Defendants' device A.

The Court: There is just a flat surface there.

The Witness: Just a flat surface.

Now, with regard to the type B machine, the same con-

clusions which I have expressed with regard to the type A 916 machine apply, except that there is apparently in this machine a contact surface which might be regarded or might be described as a curved cam surface, so that as to that distinction I would not come to the same conclusion; that is to say, that perhaps would not distinguish Defendants' type B structure from claims—from either claims 2 or 3.

So far as the feature of the magnets not being fastened to the frame of the magnet, but being fastened to the ignition block direct—I mean of the springs—not the magnets—the springs being fastened to the ignition block direct instead of the frame of the magneto, and so far as the matter of there being no rigid connection between the inductor or the inductor shaft and the yoke is concerned, what I have said as to type 1—of type A applies equally to type B and in these respects type B is distinguished definitely and materially both from claims 2 and 3.

The Court: Q Now, won't you explain a little more fully about the different mode of operation.

A When I said—what I said with regard to a different mode of operation, your Honor, referred to the capacity of this to operate as a battery ignition device—

The Court: Oh, yes.

The Witness: Entirely—

The Court: Yes.

The Witness: —when the magneto is entirely removed, and a capacity for operation which isn't present in the Kane—

The Court: Q You mean with the magneto the operation is substantially the same.

A So far as the production of the spark is concerned—

Q Yes.

A I think it is; but I do not think the structure is there.

917 Mr. Mason: Q. The application of the Kane patent in suit is described as a division of an earlier application, filed by Kane, February 2, 1910, which eventuated as the Kane patent No. 1,204,573, dated November 14, 1916. Will you examine this Kane patent 1,204,573, and state whether you find that it illustrates or describes the curved cam surface thus pointed out with particularity in the Kane patent in suit?

A The Kane patent No. 1,204,573, of November 14, 1916, makes no reference to a curved cam surface, or to any kind of a cam surface, or to any particular kind of a surface.

The Court: Q Although the figure is just the same as it is in the earlier patent, apparently.

A No, Your Honor. The second patent has an additional figure added in order to show that so-called curved cam surface.

Q Yes.

A This being Fig. 3. The Fig. 2 of the later filed Kane patent is very similar to Figure 3 of the original Kane patent, but it doesn't show the curved cam surface, and there would be no showing of it were it not for Fig. 3 which has been added to the original case.

The reason for this is that the view of Fig. 3 of the earlier filed Kane patent simply gives us the end view of these spools to which the ends of the spring are attached, and they conceal the nature of the arm back of it.

In Fig. 2 the nature of the arm, this being a top view, is concealed by the projecting end of the electrode arm 27, so that this arm may be a perfectly flat surface for all that appears in this disclosure of the earlier filed Kane patent. There is nothing one way or the other in the patent on that point, and the patent simply states—I am referring to the earlier filed Kane patent—the specification simply states with 918 regard to this part of the construction that “the end of the crank arm 27 on the movable electrode 26 is provided with an adjustable screw 29, provided with a lock nut and having a head at its lower extremity for engagement with the oscillating member 30 which is secured to rotate with the oscillating shaft 16 carrying the armature or inductor 17.”

I think that is the only reference in the entire specification to that particular part.

Mr. Mason: Q Will you state briefly just what that early Kane patent 1,204,573 relates to; what is claimed there?

A This relates to a governor controlled device for throwing the magneto out of operation when the speed of the engine exceeds a certain predetermined limit. When that happens the governor pushes out certain mechanism which lifts the push rods, and the magneto stops operating until the engine slows down again and requires further sparking.

Q Will you please compare the mechanism shown and described in the United States Milton patent 1,096,048, dated May 12, 1914, and also the British patent to Milton 24,838, of 1909, with each other and with the Kane patent in suit, both generally and particularly with respect to the illustra-

tion and description of the curved cam surface and its function.

A The two Milton patents, that is, the Milton British patent and the United States patent to Milton No. 1,096048 are identical as to their disclosure of the mechanism.

The Court: Q As to their drawing?

A And as to their drawings. I think it is evident that the drawings of the American application were substantially copied from the British application.

919 The Kane patent in suit discloses substantially this same mechanism that it set forth in the two Milton patents, and with regard to this curved cam surface in particular I find that the Milton patents both illustrate—both of them illustrate and describe this curved cam surface.

Fig. 3 of the Kane patent in suit, which I have already pointed out was not in the original Kane patent, appears to be substantially copied from Fig. 4, of the Milton patent. It is an identical illustration so far as this curved cam surface feature is concerned.

Mr. Mason: Q I hand you Plaintiff's Exhibits No. 17 and No. 18, and ask you if you will please examine these and state whether you find shown in either of these drawings this curved cam surface which we have just been referring to (handing document to witness.)

A The drawing on tracing paper marked Plaintiff's Exhibit 17, does not show any curved cam surface. This drawing is very vague as to this feature, or as to the feature of the exact construction of these related parts, but as near as I can determine from the view at the upper left hand corner of the sheet the hammer portion or engaging portion of the yoke, which includes the trip finger, is simply a flat surface to which the set screw comes in contact, the set screw apparently being in the arm of the movable electrode. This drawing on tracing paper, Exhibit 17, is a very incomplete drawing. It doesn't show any complete mechanism at all. The drawing on brown paper, Plaintiff's Exhibit 18, is like the original Kane patent in that the views are so taken that it is impossible to tell what the formation of the engaging surface of the yoke at the point where the set screw strikes it is.

920 The view at the right hand side of the sheet is a front view and looking at the springs and the spools or washers on the ends of the springs which engage the—or where these

springs are fastened to the arms 4 of the yoke, and these spools conceal the shape of the arm back of it, the spools being larger in diameter than the width vertically of the radial arms of the yoke.

The Court: I do not understand that in view of 4 there and 4 and 8/

The Witness: If your Honor will look at the—I think I can explain it. If your Honor will look at the view at the left hand side of the sheet, which is a view looking down, your Honor will see that the springs 6 are hooked around spools that are not numbered on the ends of the arms 4. Now, the figure at the right hand side of the sheet is a figure looking at the view at the left arm from the bottom of the sheet, as though it was viewed from the bottom of the sheet, and the ends of the arms, which are marked 4 in this view at the right-hand side of the sheets, are the ends which stick through the spools and which I am now indicating on the view at the left hand side of the sheet. This, I think, is precisely the same as in the two Kane patents, leaving out or disregarding Fig. 3, which was added to the later Kane patent.

The Court: Yes.

The Witness: This, for instance, is exactly like figure 3 of the original Kane patent. Your Honor will see that Fig. 2 of this original Kane patent is a practical copy of the view at the left hand side of the brown paper drawing, and that Fig 3 is a copy practically of the view at the right-hand end of the brown paper drawing, and your Honor will see this Fig. 3 has the set screws—I mean the cotter pins on the outside of the spools—shown clearly, thus indicating that we 921 are looking at the ends of the yoke arms where they stick through the spools.

Consequently, the spools themselves conceal and disguise the exact character of the engaging surface which is behind them, and it is for this reason that the third figure was added to the drawing in the patent in suit. There is no other purpose for this figure in the patent in suit than to illustrate the curved cam surface which was not originally illustrated and was not in the original patent."

The file wrapper and contents of the Kane patent in suit were offered in evidence by defendants' counsel. The examination of the witness Carter and was suspended and

HENRY G. COX called as a witness on behalf of the corporate defendants, testified as follows:

Direct Examination by Mr. Mason.

Age 45 years, residence 6729 Cylde Avenue (Chicago); magneto superintendent for the International Harvester Company. Before going with International Harvester Company witness was secretary of the Accurate Engineering Company which manufactured magneto ignition devices—low tension magnetos, in both rotary and oscillating types. It made a low tension oscillator that was not mounted on a plug—was a separate magneto, mounted independently of the plug. The magneto had a T-shaped bar on the armature shaft, which was connected to the movable electrode by a bar, so that when it oscillated the movable electrode on the igniter would oscillate. Witness produced a direction sheet of the Harvester Company, and name plate bands that went over the magnetos. The direction sheet showed the mounting of a magneto on a side shaft engine, looking at the end of the engine, and in that end is mounted the igniter, and over to one side the magneto, and the two are connected with a bar, shown on the direction sheet. Referring to the direction sheet, the witness further said:

“This is when the magneto is at rest (indicating) and here is when the tripping mechanism has pushed it over to one side, ready to let it go. In that case that bar had a head on it, and when it swung back the head would strike the magneto part, and separate the igniter point. When the movable bar swung back the head on the bar struck the movable electrode and separated the igniter contacts in the engine, making the spark. The same means we also showed here (indicating) on a part of the magneto, a band that went over the magnets, to hold them in place.”

Witness stated that the little booklet to which he had been referring was marked “Directions, International Harvester Corporation”, and that the cuts on page 6 show accurately what it was manufacturing. The booklet was offered in evidence as Defendants’ Exhibit 51. Witness further testified:

Q. “How long were you manufacturing ignition devices of this character?

A. Thirteen years.

Q. Name some of your customers, your large customers, in connection with this type of ignition devices? I mean before you went with the International Harvester?

A Fuller & Johnson; Acme Engine; Associated Manufacturers. Those are the largest.

Q Well, did you sell to the International Harvester?

A Oh, yes, but I thought you said except the International Harvester.

Q About how long has the International Harvester been using this device which you referred to in your testimony?

A Since early in 1914.

923 Q Do you know whether you are using it at the present time?

A Yes, sir.

Q Is the International Harvester using anything else in the way of a low tension oscillating magneto at the present time?

A Not as regular equipment for new engines, but purchasing repairs for those they have used in the past.

Q Are you familiar with what is usually referred to as unitary bracket structure?

A Yes, sir.

Q In connection with the oscillating magneto ignition?

A Yes.

Q Well, are they using any of that kind at present?

A Only as repairs.

Q That is all. Well, do you know when they stopped using that type of magneto, mounted on the unitary bracket,—approximately?

A About, late in 1914, I think.

Cross-Examination by Mr. Williams.

Witness stated he had been engaged in the manufacture of magneto ignition equipment for thirteen years, beginning it in 1903 as his own business which was later combined with that of another man (Robert C. Danly) in Chicago, and they then took the name of Accurate Engineering Company, in 1914. The Accurate Engineering Company was a corporation organized under the laws of Illinois. Mr. Ed Johson was interested in the company at the time it was organized in 1914. He was superintendent of the Tractor Works of the International Harvester Company. The latter company be-

gan to use the equipment furnished by the Accurate Engineering Company about May, 1914 on what they called 924 their side-shaft line, built by or under Johnson's direction at the Tractor Works. The International Harvester Company began to purchase the Accurate Engineering Company's equipment for use only on the lines which Mr. Johnson was engaged in building. That was the new line; the Milwaukee line was disappearing. Defendant's Exhibit 51 illustrates the style of magneto equipment which the Accurate Engineering Company first sold to the Harvester Company. The Direction Booklet, Defendant's Exhibit 51 was published April, 1915, but the Harvester Company was using the magneto equipment before that. The style of equipment shown in Defendant's Exhibit No. 51 was also used by the International Harvester Company on its so-called 816 Mogul Tractor Engine, which witness stated was a disappearing type of tractor and practically obsolete, although the Harvester Company is still making it. It had a lot of trouble with the ignition on the tractor engine at one time. Witness stated that in addition to the 816 Mogul Tractor Engine, and the side-shaft International Harvester Engine, the Harvester Company used equipment identical with that shown in Defendants' Exhibit No. 51 on a new type of engine made in Milwaukee, which the company was just bringing out at the time the witness testified. The first size of the engine was brought out nearly a year before, as the smallest size built, and the other engines, larger sizes, were still coming out, at the time witness testified, the last one just completed—the designs and tools just completed, and a few of the engines coming out on the market and being delivered. In addition to the type of low tension magneto equipment previously described by the witness, the International Harvester Company was using at the time he testified rotating styles of magnetos in large quantities, on one-and-one-half and three horsepower Type M, the new line in Milwaukee, and on three sizes of the old line of the Tractor Works. The

925 Milwaukee line is a cheap engine, the cheapest the International Company makes. The International Harvester Company discontinued the use of the magneto equipment with a unitary mounting for the magneto and electrode, except for repairs, in the latter part of 1914, and since that time it has not used on new engines the unitary type of magneto equipment, according to witness' understanding. If

the International Company equipped between eight and nine thousand new engines with the Webster Electric Company's unitary ignition equipment in the year 1917, witness did not know that fact. He was not connected with the company at that time. The Company did not, to his knowledge, buy several thousand of that same unitary construction from the Webster Company in the year 1918 for new engines, but witness was not in a position to know whether they did or not—and the same with respect to the year 1916, and also the year 1915. The International Company did use the Webster Electric Company's equipment on new engines, to the knowledge of the witness, until some time in the year 1914, many thousands of them. Johnson did not organize the Accurate Engineering Company, but came into it later, and when witness came into it they then became to furnish the magnetos for the Harvester Company. Before witness became connected with it they had no electrical business. Mr. Danly came from the tool room of the International Harvester Company, and he and Johnson were associated in the Accurate Engineering business before witness became connected with it, but they had no electrical end to the business and did not make magnetos. Witness was the magneto man that came in, and then they manufactured magnetos, and their first customer was the Harvester Company, and they sold to the other customers named, Fuller & Johnson, and Acme Engine Company, and Associated Manufacturers, after witness went with the Accurate Engineering Company, and continued to supply them until the Accurate Engineering Company sold its plant to 926 the Harvester Company. It had an order for five thousand equipments from the Associated Manufacturers but did not fill it all—probably filled about 500, and the same number to the Acme Engine Company, which failed and went out of business. About two thousand were sold and delivered to Fuller & Johnson. The latter were rotating magnetos. Some oscillating magnetos were supplied to Fuller & Johnson, but not of a unitary construction, nor of the construction shown in Defendants' Exhibit No. 51. Witness was shown and identified the catalogue of the Accurate Engineering Company, but could not state when it was published. Thought it was about 1915, but would not be sure of the date. Witness thought Accurate Engineering Company first manufactured a machine like that shown in the cut on page 2 of the catalogue in 1915. It purchased the Weber patent No. 820,535,

but witness did not give date of purchase. It was before the Accurate Engineering Company began the manufacture of the machine shown on page 2 of the catalogue.

The catalogue of the Accurate Engineering Company identified by the witness, was offered in evidence by plaintiff's counsel as Plaintiff's Exhibit No. 70.

The construction shown on page 2 of the catalogue Exhibit No. 70 is one in which there is a plug which extends into the engine cylinder; the plug has a flange; then there is a shelf member having a horizontal part, on which the magneto is mounted, and a vertical flange which runs up alongside the flange of the plug; then there are bolts or studs, two of them, at diametrically opposite sides of the plug member, and extending through the flange of the plug, and the vertical flange of the shelf member; and those bolts when tightened up, would hold the vertical flange of the shelf to the plug, and thus hold the parts together, while they were in operation on the engine. There is an electrode coming through from the plug member to the outer face of the vertical flange of the shelf member. It projected through a hole, 927 having some clearance, in the vertical shelf of the plug member. When the bolts were removed, that is, the two that held the equipment to the engine—the vertical flange of the shelf member would not slip off from the electrode binding post, as suggested by plaintiff's counsel. The part of it going into the engine was of cast iron, and the shelf was of steel, and the two were riveted together. The driving spring member in this equipment, as made by the Accurate Engineering Company, and as shown on page 2 of the catalogue, was mounted on the horizontal shelf of the shelf member, which carried the magneto. The Accurate Engineering Company never manufactured equipment such as shown on page 2 of the catalogue Exhibit No. 70 except experimental machines. They were put on engines and operated and were satisfactory, and were offered for sale. Witness never took any orders for them. Witness identified the description accompanying the cut on page 2 of catalogue Exhibit No. 70, which plaintiff's counsel read into the record. Witness was familiar at the time the booklet Exhibit No. 70 was gotten out, with the equipment then being manufactured and sold by the Webster Electric Company, witness was the man who got up the design for the Accurate Engineering Company. Witness identified another pamphlet shown him as a catalogue of the Ac-

curate Engineering Company showing another design, which was gotten out later. The design in Exhibit No. 70 was the conventional type of spring drive; the other was a new type of spring drive. The two booklets were identical, excepting that in the later one a new page was pasted over page 2 of the one marked Plaintiff's Exhibit No. 70. The booklet last identified by the witness was offered in evidence as Plaintiff's Exhibit No. 71. Witness did not remember delivering the booklet Plaintiff's Exhibit No. 71 to Mr. Walter Brown, of the

Webster Electric Company, on June 27, 1916, at the convention of the National Gas Engine Association, at the

Hotel Sherman, in Chicago, nor remember having had any conversation with Mr. Brown at that time about the fact of the new machine shown on the pasted in page, taking the place of the one shown on page 2 of Exhibit No. 71. Witness did not remember when the booklets like Plaintiff's Exhibit No. 71 were first distributed. A machine like that shown on the inserted page 2 of Plaintiff's Exhibit No. 71 was first gotten out in 1916. Witness could not state just when. Witness did not recall having met Mr. Brown at the convention at the Hotel Sherman on June 27, 1916, but stated that he had met Mr. Brown at all of the conventions.

Witness did not recall having told Mr. Brown that the machine shown on page 2 of Plaintiff's Exhibit No. 70 was no good, or that it proved to be unsatisfactory, or anything of that sort; but did recall having explained to Mr. Brown that the machine shown on the inserted page of Plaintiff's Exhibit No. 71 was substituted for the one shown on the original page 2 of Plaintiff's Exhibit No. 70 because the latter magneto was original, and they could not sell it, while the one shown in Plaintiff's Exhibit No. 71 was conventional and would sell. Witness did not recall that at the convention at the Hotel Sherman witness picked up a booklet like Plaintiff's Exhibit No. 71, from underneath some apparatus, and handed it to Mr. Brown, and that the latter, in opening it and attempting to run through it, said something about there being a page stuck down. The inserted page 2 of Plaintiff's Exhibit No. 71 was pasted over the original page 2 of the earlier catalogue like Plaintiff's Exhibit No. 70 and then distributed. The machine shown on this inserted page of Plaintiff's Exhibit 71 was not the machine described by the witness during his direct examination. The latter, with the T-shaped member, is shown on the right-hand page. The Accurate

Engineering Company sold machines like the one 929 shown on page 2 of Plaintiff's Exhibit No. 71 to Montgomery Ward & Company but to no one else. They had an order for a thousand which witness thought was filled. In the machine shown on the inserted page 2 of Plaintiff's Exhibit No. 71 the entire equipment, including magneto, and operating springs, was mounted and carried as a part of the plug member. The Accurate Engineering Company was bought out and taken over by the Harvester Company in April, 1917. Witness could not state how long before that date it was that the machine shown on the inserted page of Plaintiff's Exhibit No. 71 was gotten out. Witness went with the Accurate Engineering Company in March, 1914. At that time it had not gotten out the machine shown on page 2 of Plaintiff's Exhibit No. 70. The Weber patent was bought in the summer of 1915, and then the machine shown on page 2 of Plaintiff's Exhibit No. 70 was made, and some time later than that, the machine shown on the inserted page 2 of Plaintiff's Exhibit No. 71 was made, and that machine was intended to take the place of the one shown on the original page 2 of Plaintiff's Exhibit 70. In the catalogue, Exhibit 71, the new page 2 was pasted over page 2 of the older catalogue because they could not sell the design shown in the older catalogue. The Harvester Company took over the magneto business of the Accurate Engineering Company, and acquired the Weber patent. It never made for use on its own engines an equipment such as that shown on page 2 of Plaintiff's Exhibit No. 70. Witness was operating the magneto manufacturing department of the Harvester Company at the time he testified, but had never used "the good thing shown on page 2 of Plaintiff's Exhibit 70 on the Harvester Company's engines," nor the equipment shown on the substituted page of Plaintiff's Exhibit No. 71. Witness had talked with Mr. Lord, head of the Patent Department of the International Harvester Company, since witness became connected with the company.

930 On re-examination, witness stated that between forty and fifty thousand of the devices of the type shown on page 6 of Defendants' Exhibit 51 had been used by the International Harvester Company up to the date of his testimony.

On re-cross-examination witness stated that the reason why the Harvester Company equipped its engines with the ap-

paratus shown in Defendants' Exhibit No. 51, instead of with a unitary construction, was that Mr. Johnson thought it would be easier to remove the igniter plug, for cleaning and inspection, to have it separate from the magneto, he thought he could get a better advance and retard control, and Mr. Johnson thought that had proved to be the case. Witness was not a gas engineer and could express no opinion personally, but was an ignition engineer, and thought Mr. Johnson was right. It was not a fact that the Harvester Company had a lot of trouble and a lot of complaints about the machine shown in Defendant's Exhibit No. 51. Such complaints would come to the witness. Witness would prefer to use the equipment of Defendant's Exhibit No. 51, rather than the unitary equipment, with the International Harvester type of engine, because the driving mechanism is at one side, and a considerable distance from the igniter plug, the latter being in the head. It is not as easy to drive it as it would be on a side-shaft engine, push rod type. It was the matter of getting the push rod to the magneto that made witness think the type shown in Exhibit No. 51 preferable for that particular style of engine. In the machine shown on page 2 of Plaintiff's Exhibit 70, it is a gasket or washer of asbestos or similar material that makes the joint tight between the plug and the cylinder. The gasket had two holes for the bolts to go through, and a corrugated inner surface on the flange, and the bolts would draw the gasket up against the flange, on either side of the center. If only one bolt were used, a bolt on one side, the gasket would probably be blown out.

931 Defendants' counsel offered in evidence the illustrated apparatus produced by Mr. Carter in connection with the Weber patent, No. 820535, and it was marked Defendants' Weber Illustrative Apparatus No. 52; also the Wattles model, produced by Mr. Carter, which was marked Defendants' Exhibit Wattles Magneto No. 53.

HENRY W. CARTER resumed the stand on behalf of the corporate defendants, and further testified as follows:

Cross-Examination by Mr. Williams.

In Plaintiff's Exhibit Defendants' Type A Apparatus the striker arm of the yoke member necessarily slides upon the engaging end of the electrode arm, since the centers are not aligned. In low tension battery ignition, involving a battery and a spark coil connected in circuit with the electrodes within the engine cylinder, the spark coil is an induction coil. Witness stated that he did not know just how it was made, or how many windings it had, or the size of the wire which is for the purpose of getting more voltage or spark. Any induction coil is necessarily made of two kinds of wire, coarse wire and fine wire, and that is what is used with battery ignition according to the understanding of the witness. Where an induction coil is used to raise the voltage the battery would be connected with the coarse winding and the fine winding would be connected with the electrodes. Asked what makes the current in the fine wire winding, witness said:

"Well, now, I had not stopped to consider that proposition when I testified as I did. I do not even know that there is a kick coil used in that connection; just now I cannot see just how the kick coil could be used. I do not know that it is a matter of any importance, so far as the proposition of 932 how these devices that we were talking about worked.

It is only a question of the source of current. I cannot answer the question."

Q In those prior art patents that you refer to, the Cooper and Olds and Dickinson, what circuit do you understand was employed in connection with the battery?

A I don't think either of these patents particularly designate what kind of a circuit. It should be certainly a circuit as will form a sufficient current to make the spark when the electrode is broken suddenly.

Q In view of the fact that the patents do not disclose the source of current or nature of the circuit, will you describe the circuit arrangement which you understand was to have been employed in connection with this apparatus as understood by one skilled in the art?

A An ordinary battery of sufficient capacity, one circuit

of which was connected to the insulated electrode, which is ordinarily the non-movable electrode, the stationary electrode, and the other terminal of which is connected to the movable electrode or to ground, as it would be anywhere on the engine, would be a satisfactory or proper arrangement for this connection.

Q What voltage of battery would ordinarily be employed in a system of that kind?

A About six I should say.

Q Six volts?

A Yes, five or six volts.

Q And you would connect one terminal of the battery, as I understand, with one of the electrodes and the other terminal with the other electrode?

A Yes.

Q And that would be the circuit arrangement?

A Yes.

933 The Court: Q Without any coil between?

A Without any coil between.

Mr. Williams: Q And that would produce a spark, would it?

A I think so, yes.

Q So if we were to get a six volt battery and connect it with the fixed and the movable electrodes of this Plaintiff's Exhibit Defendants' Machine Type A and connect the terminals with the two electrodes and then operate the mechanism to separate the electrodes, we would get a spark between the terminals?

A Ought to, I should say.

Q And that would be without any induction coil or any other coil?

A Yes.

Q And that is the way you understand that the apparatus is intended to be used?

The Court: With a battery.

Mr. Williams: Q With a battery.

A That is the way it could be used with a battery. Now. I never paid any attention to the question how the kick coil was used in that connection. I do not see for these purposes there is any reason for inquiring. I think a kick coil is sometimes used, but I cannot tell just how it is used. I don't know.

Q Now when you speak of a kick coil you are talking

about this coil you describe as having the coarse and the fine winding?

A Yes.

Q When that kind of a coil is used with the coarse and the fine windings what is it that causes the production of a current in the fine wire winding?

A Generally speaking, it is done with a vibrator.

Q On the end of the coil?

A In the coil or in connection with the coil.

Q And what is the function of that vibrator?

934 A That vibrator is to keep a rapid play of make-and-break passing through the—keep a rapid play of current, a make-and-break of the current, of the battery current, passing through the primary coil, so that the induction coil or the secondary coil will receive a stepped up voltage that is due to the rapid making and breaking of the current. An induction coil consisting of windings, of coarse and fine windings necessarily, depends for its inductive action on the fact that there are current changes going on in the primary coil. A constant current field primary coil will not produce a current in the secondary coil.

Q This current that is produced in the secondary or fine wire coil of this induction coil, that is a high tension current, is it not, a high tension alternating current?

A Yes.

Q And that is the current which, as I understand you, is used in connection with this make-and-break igniter mechanism such as illustrated in the Dickinson, Cooper and Olds patents.

A No, I did not say so.

Q That is used, then, in connection with what?

A I didn't say that either.

Q How?

A I said a while ago that their kick coils were used for, as I understand that, in connection with these devices, but that I could not tell you just how they were used; and what I was describing was, simply, you were asking as to, generally speaking, how these coils worked. But as to whether they are used in this connection or not, I cannot tell you, I do not know.

Q You do not think they are used, however?

A I cannot tell you that. There must be a sufficient source of current, in connection with any of these battery

ignition devices— A battery ignition device itself has nothing to do with the source of current, or is not changed or altered or varied by the source of current.

935 Q And that regardless of whether it is battery or Magneto?

A It might be a battery, and it might be a generator. It might be a magneto generator, or it might be what you call an electric generator, the only difference between the two being as I understand it, in one case you have a wound field, and, the other, fields that are in the nature of permanent magnets.

Q Do you mean that that is the difference between the electric generator and the magneto?

A I think so, yes, sir.

Q Where, in the so-called electric generator, as you say where, instead of the permanent magnets, there are wound fields,—what is it that supplies the current to energize the field windings? Where does that current come from?

A Why, ordinarily from a magnet; it may be a shunt wound dynamo, or it may be a series wound dynamo, or there may be an energizing dynamo, separate, for energizing the fields.

Q If you were to take, say, this Defendants' Type B. apparatus, as you have it in your hand, and take the temper out of the permanent magnets, or otherwise substitute a soft iron or steel magnet, and then wind a coil of wire around that magnet, field magnet winding, then you would have an electric generator, would you?

A If you supply that coil with current, certainly.

Q If you do?

A Yes.

Q Now, where would that coil be supplied with current, or what would supply it with a current?

A It might be supplied with a current from the armature which is rotating in that field, or it might be supplied with a current from some separate source. That separate source generally is only in connection with very large generators, that are what we call separately excited.

936 Q Now, do you mean that you could substitute that coil, wound field magnet, in this Defendants' Type B. apparatus, and connect that—

A An oscillating device?

Q And connect that with the armature, in an oscillating

device, in such a way that your field would be energized, to serve any useful purpose?

A I should say not, no. We were talking about magnetos, as I understood it, for furnishing a constant current for ignition purposes, in connection with such a system as the Cooper and Olds patents, that we referred to.

Q Now, coming to an oscillating magneto, won't you describe just what it is that produces the current which flows between the electrodes, at the proper time?

A I never investigated that question very closely. I have accepted the fact that when an armature is rotated within a field of a magneto, that there are certain changes of position at which the current is particularly generous, that is, the lines of force, the magnetic lines of force which pass through the poles of the magneto, and the armature, are—the current is caused by the variation in those lines of force, and as the armature swings between the poles, there are certain positions at which the change or variation in those lines of force is at the maximum, and that is where the current generation is noticeable. Now, as to just exactly the position in that regard, I have not investigated, and I would not undertake to say.

Q Now, you say that the change in the magnetic flux is the thing that induces the flow of current; is that correct?

A I think so, yes.

Q Now, the magnetic flux through what? What part of the magnetic flux is it, or the change of what function of the flux is it?

937 A When the armature is in a position, we will say, extending directly between the poles of the magnets, it furnishes a direct path for the magnetic flux between those poles. Now, when the position of the armature is changed, is shifted, so that the flux can no longer pass, we will say, directly by that path, it must shift to a path through other poles, or through other arms of the armature, why, there is a change of flux which brings about the generation of the current.

Q Let me ask you a little more in detail about that. Supposing taking this tripolar type of machine, the rotor is in a position such that two of the arms are directly in line with coils; do I understand you that under that condition the magnetic flux threads through the coils, passes largely or entirely through the coils?

A The magnetic flux,—if you mean through the wire coil,—the magnetic flux never passes through the wire coil.

Q Well, then tell us where the flux is.

A The flux is through the poles of the magnet on which the coils are wound.

Q That is, these poles, the center poles of the tripolar piece, do you mean (indicating)?

A Well, now, when you take that tripolar form of magnet, you are getting into a complication of considerations, as to just exactly the effect of those polar arrangements, multiple-polar arrangements, which I would not undertake to say anything about, because I have not paid any attention to that subject, at all. There are certain Podlesak patents in suit that I notice have to do with that particular thing, but I have not examined them particularly, because I could not see that they had any bearing whatever upon any of the comparison which I have been called upon to make; and the question of whether there is a tripolar magneto there, or a bi-polar magneto, does not alter in the least the fact that there

are certain movements of the armature which result in just the kind of a current flux which Mr. Webster described in connection with his oscillograph diagrams, in which he shows just what happened,—I mean, just what would happen there as to the generation of the current, in a wave, which has a very sharp peak; now, as to just exactly how that current is generated, that is, how, exactly, the magnetic flux operates in generating that current, as I say is something that I have not paid any attention to, and I cannot answer with regard to it.

Q. What is the form or style of low tension magneto with which you are most familiar?

A If you are considering the question of how the current is generated in a magneto, of exactly how the magneto works to generate this current, I am not particularly familiar with any form. I simply never have given that matter any consideration; there is no reason why I should; there is no comparison in this case which is in the slightest degree affected by the exact character of the magneto employed, or the question of how the flux operates to produce the current.

Q Now, can you tell us how in any kind of magneto the current is generated, that is, what it is that causes the current to be generated, whether tripolar or bi-polar, or any form at all?

A An electric current is generated only in one way, as I understand it, and that is by changing the number of lines of force that are threading their way through a loop of wire. Now then, the question of how a current is generated in a given kind of a magneto depends on the character of the magneto. In the defendants' type of magneto, which has a wound armature, you have loops of wire which are being rotated or oscillated back and forth within a magnetic field, which may be considered as existing between the poles of the magnets. Now, then, as those loops of wire are turned, the number of lines of force which thread through them are varied, and the generation of the current is brought
939 about by that fact. Now then, if you take the kind of magneto which you have here (indicating) that is, referring to the Milton magneto, either the old Milton, or the Milton magneto of the Kane and later Milton patents, we have essentially the same situation, except that the coils of wire in this case are mounted on the poles of the magneto, and the armature simply forms a path for the magnetic flux. Now then, the flux,—the number of lines of force of the magnetic flux which are threaded through those coils will be varied in this case accordingly as the armature forms a direct path between these poles, between the poles on which the coils are wound, or is diverted to other poles, or is swung to a position where it does not form such a direct or complete path; and in that way the lines of force are being varied through the coils,—a current is generating in the coils. Now, that in general is the theory of the production of electric current either in a magneto or in a generator; and, aside from that general statement of it, I have paid no attention to the exact manner in which any of these magnetos bring about the generation of their current.

Q Now, as the rotating part of any of these forms of magneto, bi-polar or tri-polar, or what you please, as the rotating part turns, when and where is it in the rotation that the peak of the wave, the peak of the current wave is generated?

A With a bi-polar arrangement, I understand that the peak of the current wave is generated just as the ends of the armature leave the poles,—just as the path, I might say the direct path, direct metallic path for the magnetic flux, is cut off; but in this tri polar form of armature I would not undertake to say just where,—I have not investigated that,—just where the peak of the current occurs.

Q Will you look at this Plaintiff's Exhibit 49, diagrammatically illustrating Defendant's Device Type A, and state whether that shows the armature in the position at which you conceive the peak of the wave to be generated, assuming that the rotation is in a clock-wise direction as you view the picture?

(Plaintiff's Exhibit 49 shown witness.)

A Substantially so, I should say. It will be noted here that the head, if I may so describe it, of the armature, has just left the pole piece with which it was just previously engaged, so to speak; of course it was not in actual contact with it, but in very close rotative relation to it; it is at that moment, as I understand it, that the peak of the wave occurs; but I have never personally investigated that phenomenon, and I simply am stating what I have been informed in that direction. The essential fact, of course, is simply this,—that in a given rotation of the armature there will be a wave of current produced and necessarily that wave of current must have some definite peak, or high point.

Q And that definite peak or high point has a fixed relationship, as I understand you now, to a given angular position of the rotating member; is that correct?

A Yes, sir.

Q Now, Mr. Carter is it your understanding that that is true regardless of the speed at which the rotating member is rotated, that is, that the peak of the wave occurs at a fixed given angular position, and regardless of the speed at which the moving part is rotated?

A I cannot answer that question.

Q How?

A Whether that is varied by the speed at which the part is rotating, or not, I do not know.

Q Now, let me call your attention to the magneto which you used as a part of Defendants' Exhibit 52, illustrative, as you said, of the Wehr apparatus; and let me ask you particularly how the speed at which you turned the rotor, at the time you demonstrated a spark production, with the magneto removed from its driving spring, compared with the speed at which that rotor moves when actuated by the spring.

A Why, I should say that when actuated by the spring, it moves very much more rapidly.

Q That it does when—

A That I could move it with my fingers.

Q Now, when the spring moves it, as you say, very much more rapidly than you are able to move it with your fingers, does the peak of the wave occur at the same position as it will occur when you do move it with your fingers?

A I cannot tell you that.

Q Did I correctly understand you during your direct testimony to say that the unitary structure, as I think you designated it, failed to secure all of the advantages ascribed to it by Mr. Webster in his testimony?

A I do not think that I made any assumption as to all of the advantage, or as to what advantages, except as a certain question asked me, as I recollect it, was posutlated on the proposition that Mr. Webster had assumed that these various advantages, including one which involved the proper timing of the spark with reference to the cycle of the engine, was brought about by the unitary structure. I pointed out that if Mr. Webster made any such statement, it was in my judgment an error. I do not know that he did.

Q Now, in this Defendants' Exhibit No. 52, apparatus, there is a machined taper surface on the plug, which as I understand it is intended to fit into a machined taper hole in the cylinder wall; is that correct (indicating)?

A Yes, there is the way those Fairbanks-Morse plugs are always made.

Q Now, is there any gasket used between the plug, or any part of it and the cylinder wall?

A No.

942 Q When that taper fit is employed?

A No, sir.

Q Now, when for the first time in the art was such a tapered plug used in connection with a correspondingly tapered hole in the engine cylinder wall?

A I cannot tell you that.

Q Was it as early as 1909?

A I do not know.

Q Used, ever? How?

A I do not know. I did not know of it myself until the exhibits were introduced by the plaintiff in this case.

Q Was this Exhibit 52 apparatus, Defendants' Exhibit 52 apparatus, made under your direction?

A No, sir. Well, I will say that I suggested that such an apparatus be made, but I had nothing to do with making it.

Q When was it that you asked to have it made?

A A couple of weeks ago, or so.

Q Since the first session of this trial?

A Yes, sir.

Q That is, during the intermission, was it?

A Yes, sir.

Q Now, if, instead of this tapered plug and tapered hole in the engine cylinder wall, as exemplified in this Defendants' Exhibit 52 apparatus, there were used a cylindrical hole in the engine cylinder wall, and a roughly or loosely fitting plug, and a flange at the surface of the plug, then a gasket would be employed, would it not, between the flange of the plug and the cylinder wall?

A That would be the natural practice.

Q Well, that is and was the common practice, was it not?

A I think so, yes.

Q That was the common practice in 1909, was it not?

A I think so.

943 Q And prior to that time, always, was it not?

A Except where screw plugs were employed, I think that is true.

Q Was a screw plug ever used for a make-and-break igniter, or low tension igniter, in actual practice?

A I cannot tell you that.

Q Did you ever hear of it, or know of it?

A It was shown by the Wattles patent.

Q Was the device of that patent ever made or used, to your knowledge?

A I know nothing about it. I understand it was.

Q Well, you have answered the question, I think. Now in this Weber patent, 825,035, figure 2 of the drawings shows four circles on the inner face of the plug flange, does it not?

A Yes, sir.

Q And three—

A That is, four circles that would be taken to indicate holes. There are several other circles—

Q Well, I mean around the periphery, near the edge (indicating).

A Yes, sir.

Q And three of those circles are of the same size, and one is a little larger; that is correct?

A That is correct, yes.

Q The one representing the pin, thirty, is larger than the other three, is it not?

A Yes, sir.

Q And of the three bolt heads shown in figure 3 of the Weber patent, all of them are of the same identical size and shape, are they not?

944 A Yes, and also those shown in figure 4 are apparently of the same size and shape.

Q Referring now to this apparatus, Plaintiff's Exhibit 11, and 11-A, and to the apparatus, Plaintiff's Exhibit 12, did I correctly understand you to say in substance during your direct testimony, that if the exhibit 12 apparatus, exemplifying that of the Kane patent, is tilted or shifted in its position on the engine cylinder, that the time of the spark production relative to the engine cycle will be altered?

(Plaintiff's Exhibit 11, 11-A and 12 shown to the witness.)

A Yes.

Q And that the same thing is true of the apparatus—of Plaintiff's Exhibit 11 and 11-A?

A Yes, sir.

Q Do you recognize that it is true, however, that when the magneto of the Exhibit 11 apparatus is shifted in its position on the cylinder, that the relationship between the generating mechanism and the electrode mechanism will necessarily be altered or disturbed; that is to say, if the plug is bolted to the engine at one point, and the magneto per se is supported upon the engine at some other place, that if you for some reason—if for some reason the magneto itself is shifted in position, the time or position at which the electrodes in the engine cylinder are opened, relative to the time or position of the rotor magneto, will be altered?

A Yes, sir.

Q That is not true, is it, of the plaintiff's Exhibit No. 12, and No. 47, apparatus?

A No.

Q Now, do you say that in apparatus exemplified in Plaintiff's Exhibit No. 11, you will get the same spark production and the same synchronism as between the opening of
945 the electrodes, and the generation of the current wave, regardless of any shifting of the generator?

A No.

Q Or, shifting of the position of the generator?

A No.

Q There will be a difference, will there?

A If the generator shifts, where you have a double unit, that relation will change.

Q Well, that will change the spark production, will it?

A Yes, sir.

Q So that with the magneto in one position you might get an effective spark, whereas with it shifted into another position you might not get an effective spark?

A That is correct. That, of course, is assuming that the device is put on so flimsily that it will shift, which I take it was the principal trouble with the particular device, that Exhibit No. 11. The mounting of it was intolerably flimsy, ridiculously so. In practice, where the apparatus is properly bolted onto the engine, I think this matter of the magneto shifting is largely an illusion.

Q And also the matter of the shifting of the position of the plug, is that similarly an illusion?

A The matter of the shifting of the plug? Yes, quite true. The natural way to make any such device, where you wanted to register, is to dowel it in, just as these devices are doweled in, as in the Podlesak patents.

Mr. Williams: This Wattles apparatus, that you referred to, has that been offered in evidence?

Mr. Mason: Yes, that is 53.

Mr. Williams: Defendants' Exhibit No. 53, when was that first made, do you know?

(Defendants' Exhibit 53 shown to witness.)

A I do not know anything about that at all. I saw it 946 first last week. Apparently it was—

Q Well, I think you have answered the question. That conforms, does it not, with the Wattles' patent No. 990,935, the application for which was filed on June 1, 1910, does it not?

A Substantially, yes. When I said I knew nothing about it, I mean I know nothing about the original origin or history of that particular piece of apparatus. All I know about it is the comparison that is made with this patent.

Q Well, you do not know that apparatus, like this Wattles' Exhibit, or like this Wattles' machine, Defendants' Exhibit 53, was ever made—

A No, I do not know.

Q —as early as 1909?

A No. It would be my conclusion that it was not.

Q That it was not?

A Was not. I only referred to it as embodying in some respects the construction of the earlier wattles patent. Per-

haps I should better say, as "illustrating," rather than "embodying."

Mr. Williams: That is all, I think.

Mr. Mason: That is all.

The Witness: I think I should like to say, before I leave the stand that, in thinking over this proposition of the use of a coil in connection with these ignition devices, that a coil would not and could not be used in connection with the make-and-break battery ignition, leastwise I do not now see how it would be possible.

Mr. Williams: Well, in view of that statement, I think I will ask you another question. Won't you get those batteries here, Mr. See?

(Dry cell batteries produced.)

Q As I understand you, batteries would be used with this equipment by connecting as I now do, a battery of some six volts with the fixed and moveable electrodes, of say, this Plaintiff's Exhibit Defendants' Type A apparatus?

947 Q Now, I will connect the terminals of the four cells of dry battery, one with the fixed electrode of this Plaintiff's Exhibit Defendants' Machine Type A, and make the other wire free, as it is, to be connected with the frame; and will ask you if that is the circuit arrangement which is employed when this apparatus is to be used as a battery igniter?

(Counsel illustrates with batteries and apparatus.)

A Yes, I understand so.

Q Now I have made the connection with the frame, have I not? (Indicating.)

A Yes.

Q Will you open the contacts there, and ascertain whether you get a spark? I will hold the connection. You can do that, can't you?

A Have you got one of those levers there, for handling this proposition?

Mr. Williams: Yes, get him one. Isn't there one of those levers there? I do not find the lever here, Mr. Carter. Can you separate those with a screw driver, in order to ascertain that?

(Witness demonstrates, with apparatus.)

Q Do you get any spark?

The Court: No, he did not get any spark. But you did not get them apart that time. Try it again.

(Witness demonstrates.)

Mr. Williams: Q Let me ask you this question: You have endeavored to operate this apparatus, and you could not see that any spark was produced, could you?

A No.

Q Now, without changing the apparatus at all, let me connect this coil in circuit with the battery. I will connect it in series, between the battery and the apparatus which you have been attempting to operate, and I will ask you now 948 to operate it, with this coil connected in circuit; and then state whether or not you see any spark.

(Witness demonstrates)

Q Will you look at that, Mr. Carter, and see whether there is any spark.

The Court: A good big spark.

Mr. Williams: How?

The Court: A good big spark.

Mr. Williams: Q Do you think it was a good big one, Mr. Carter?

A I did not see whether it was a big one or a little one.

Q Won't you look? I want the record to show.

The Court: I guess it is sufficient, if I state so, is it not?

Mr. Williams: I am satisfied. That is all, Mr. Carter.

The Court: What kind of a coil is that, Mr. Williams?

Mr. Williams: Why that is a common coil, with a single coil of wire on it, coarse wire.

The Court: You think it was rather coarse wire?

Mr. Williams: I suppose so. That is what I told him to go out and buy; and I guess that is it.

The Court: And the wire is all the same--

Mr. Williams: Single winding. That is all.

The Court: Is the testimony closed?

Mr. Williams: I presume we had better offer the kick coil and the battery; I ask that they be marked as plaintiff's Exhibits 72 and 73, respectively.

949 H. R. VAN DEVENTER recalled, on behalf of the corporate defendants, further testified as follows:

Direct Examination by Mr. Mason.

Witness identified himself as the inventor named in patent No. 1,236,790, which has to do with battery ignition. Asked to explain the apparatus to the court, the witness said:

"This device here is equipped with a magneto. In case of any trouble with the magneto it is removed from the bracket, and on some classes of engines, of which there are large numbers in use, a battery of suitable voltage is connected directly to the frame of the engine, and the insulated electrode. In such cases no kick coil is used, the voltage of the battery being usually from sixty to eighty volts, the voltage being raised to increase the voltage sufficiently to produce the proper spark at the electrodes, that matter being merely a question of the voltage of the battery used. In the smaller engines, the most common practice is to connect a battery of from six to eight volts, in series, with the usual kick coil, producing results which have just been exhibited here by Mr. Carter.

Q Why was it, in the first instance here, when they made the trial, they did not get any spark?

A With the dry cells?

Q With the battery, yes.

A Well, the voltage was not sufficient.

Q Will you state just approximately what is the condition, or position, rather, of the rotor, or armature, of these magnetos, to the pole pieces, when you get your highest, maximum current generation?

A Mr. Mason, that is a very difficult thing to explain, 950 with any given type of magneto. In the rotary type, having an armature of the diameter of that used on the smaller magneto which you have there, the critical point or peak occurs with the armature approximately a sixteenth of an inch breaking; now, that would depend so largely on the electrical characteristics of the machine, the characteristics of the iron in the armature, and other factors, that it is almost impossible to answer it definitely.

Q But it is a fixed equation, for any definite magneto; is it not?

A Substantially so.

Asked if the speed elements have much effect upon the time at which the maximum current wave was generated—the speed of the rotor or armature, witness said:

“There is, due to the reaction of the armature itself, a difference in the time at which the spark is produced, but I think that difference, is totally lost sight of in actual practice, because it is so small that it would require laboratory instruments for its deduction. For instance, if I operate this magneto here, or, rather, some one that I can operate by hand, with the springs, you would get the break at one time, and if I operated it with my fingers you would get it at another, the difference due to the difference in speed at which the armature was rotated would be so slight that it would only be measurable in terms of thousandths of seconds. There is no way to determine it outside of the laboratory, certainly none in the field on gas engines.

The Court: Mr. Webster says that when the armature is turned by the action of the rod of the engine, it goes about 30 degrees and the flies back by the action of the spring, and then is the maximum current?

951 A Yes, sir, when it goes back beyond the center and flies back on the rebound.

The Court: By the impulse of the spring?

A Yes.

Mr. Mason: Q And when you make the current by hand you turn it as though the spring would turn it, in the same direction?

Mr. Williams: I object; that is leading.

Mr. Mason: Q It has been testified here by Mr. Webster, I believe that the shifting of the magneto when mounted on the boss threw the spark out of timing with the compression in the engine; would it make any difference whether this magneto was on a boss or on a spark plug as to throwing it out of time with the compression of the engine.

A None whatever.

Q That is, if the magneto shifts, it is bound to get out of time wherever it is placed?

Q Yes, wherever it is placed, regardless of its location.

Q Whether it breaks with your finger or earlier?

A Yes, sir. I would like to continue that answer.

The Court: Go on.

A The question as to the timing of the magneto with the piston is very serious in some types of magnetos and

not so serious with others. Now, with the rotary type magneto, with which I am most familiar, considerable latitude in movement can be allowed without seriously affecting the operation of the device, and if I am permitted to have the model, that can be operated by loosening the bolts on the magneto; we will move it around on the base and you can see that that is not such an important factor.

Mr. Mason: Q Which one do you have reference to?

A The one with the handle on it, the Weber model, I think.

(Mr. Williams indicates a model.)

A I don't know anything about that one. (Indicating)

That is movable on the base to some appreciable extent. Now, you see the magneto is loose on its supporting base. Now, that magneto is on the engine. (Indicating on stand.) Will you operate that, Mr. Mason? I will have to hold the magneto in one position? Is there a spark?

Mr. Mason: Turn it around so the Court can see it.

The Witness: See that spark? I want to move the magneto as far as I can without actually getting this rod out. Do you see the spark?

The Court: Yes.

A Now, when you move the magneto laterally on its base about a quarter of an inch, and I call your attention to the fact that that lateral movement—does it still spark?

The Court: Yes.

A (Continuing) —does not affect— It is completely out of engagement with its operating mechanism now,—does not affect the time of the production of the spark in relation to the engine cycle, provided the face of this electrode arm here is made sufficiently broad enough to allow for any lateral shifting of this. Now, to shift it in the other direction does not affect it, either, provided the face of this striker arm is sufficiently broad to permit it. It is only a question as to the size of the various parts. Is it worth while to shift this the other way on the base?

The Court: No.

Mr. Mason: I guess that is sufficient. That is all, unless Mr. Williams wants to cross-examine.

Cross-Examination by Mr. Williams.

Q In making this demonstration just now, you did not make any angular shift of the magneto did you?

A It is shifted about on its bracket, as it would naturally come loose on a bracket of that character.

A You did not make any angular shift of the magneto, did you?

953 A You mean, rotate the spark plug in this engine?

Q You know what I mean by an angular shift as between the magneto and the electrode mechanism.

A No; you couldn't make any angular shift. It is physically impossible.

Q You didn't make any, then, did you?

A Certainly not; it is impossible.

Q Well, that answers the question. That is all.

Mr. Mason: We offer in evidence the file wrapper and contents of the Kane Patent 1204573 and ask it be marked Defendants' Exhibit Kane File Wrapper 1204573, No. 54.

Mr. Mason: We offer in evidence the file wrapper and contents of the Kane Patent 1280105, granted September 24, 1918? and ask that that be marked Defendant's Exhibit Kane File Wrapper 1280105, No. 55.

Mr. Mason: We offer in evidence a certified copy of the transcript of record in the interference of Podlesak versus Kane, Patent Appeal Docket No. 1147, and ask that it be marked Defendant's Exhibit Kane-Podlesak Transcript No. 56.

Mr. Mason: We offer in evidence certified copy of the decision of the Court of Appeals of the District of Columbia in the interference with Kane versus Podlesak, Appeal Docket No. 1147 and ask it be marked Defendant's Exhibit Kane-Podlesak Interference No. 57.

Mr. Mason: We offer in evidence the Kane patent 1204573 and ask that it be marked Defendant's Exhibit Kane Patent 1204573 No. 58.

Mr. Mason: We offer in evidence Weber Patent, 820535, and ask that it be marked Defendant's Exhibit Weber Patent, No. 59.

Mr. Mason: We offer in evidence the Wattles Patent, 909264 and ask that it be marked Defendant's Exhibit Wattles Patent 909264, No. 60.

954 Mr. Mason: We offer in evidence copy of Hennig Patent No. 916312 and ask that it be marked Defendant's Exhibit Hennig patent No. 916312, No. 61.

Mr. Mason: We offer in evidence the Wattles Patent No. 990935, dated May 2, 1911, and ask that it be marked Defendant's Exhibit Wattles Patent 990935, No. 62.

Mr. Mason: We offer in evidence the Olds Patent, 635,506, dated October 24, 1899, and ask it be marked Defendant's Exhibit Olds Patent No. 63.

Mr. Mason: We offer in evidence the Dickinson Patent 754,286, dated March 8, 1904, and ask it be marked Defendant's Exhibit Dickinson Patent No. 64.

Mr. Mason: We offer in evidence the Cooper Patent, 773,063 dated October 25, 1904, and ask that it be marked Defendant's Exhibit Cooper Patent, No. 65.

Mr. Mason: We understand it is admitted between counsel that the British Patent to Milton No. 24838 of 1909, was sealed August 25, 1910. That is subject to correction if in error.

We offer in evidence the certified copy of the assignment of John L. Milton to Lynn A Williams, Trustee, recorded in Liber D-99 page 86, and ask it be marked Defendant's Exhibit Milton Assignment No. 66.

Mr. Mason: We offer in evidence a certified copy of assignment of Lynn A. Williams, Trustee, to the Webster Electric Company, recorded in Liber D-105, page 69, and ask it be marked Defendant's Exhibit—

Mr. Gifford: When was it recorded?

Mr. Mason: July 1, 1918.

Mr. Gifford: What is the date of the assignment?

Mr. Mason: 28th day of June, 1918, it bears the date. And ask that this be marked Defendant's Exhibit Assignment Lynn A. Williams, Trustee, to the Webster Electric Company, No. 67.

955 Mr. Mason: We offer in evidence the certified copy of the Assignment of the Webster Electrical Company of West Virginia to the Webster Electric Company of Wisconsin, dated 12th day of March, 1918, recorded July 1, 1918, Liber D-105, page 92, and ask it be marked Defendant's Exhibit Assignment Webster Electric Company of West Virginia to Webster Electric Company of Wisconsin, No. 68.

Mr. Mason: We offer in evidence the patent of H. R. Van Deventer, 1236790, August 14, 1917, and ask it be marked Defendant's Exhibit Van Deventer Patent No. 69.

Mr. Mason: We offer in evidence clippings of advertising matter of the Webster Electric Company, Racine, Wisconsin, and ask that they be marked Defendant's Exhibit Webster Electric Company Advertising Matter, No. 70.

Mr. Mason: We offer in evidence a circular entitled "Webster Milton Low Tension Magneto," and ask that it be

marked Defendant's Exhibit Webster Electric Company Circular, No. 71.

Mr. Bulkley: It is stipulated by counsel that the patent of Kane, granted on the original application, No. 1204573, was assigned on April 20, 1916, to the plaintiff in this lawsuit.

Mr. Sturtevant: Now, I assume that the stipulation you have entered into has the same effect with respect to the second patent. I have not seen that.

Mr. Bulkley: It is also stipulated that on the same date, to-wit. April 20, 1916, the pending application finally resulting in the Kane patent in suit was assigned to the plaintiff in this lawsuit.

Here occurred a discussion between counsel respecting the date of payment of the last notes given by the Webster Company to Mr. Milton in payment for the patents and applications which had been assigned by him to Mr. Williams as trustee. The original notes were produced by plaintiff's counsel and it was agreed that the last of them was paid on or before June 9, 1916.

956 Defendant's counsel offered in evidence as Defendants' Exhibit 72 a letter dated April 22, 1915 from Lynn A. Williams to Henry J. Podlesak, it being stipulated that the letter was written by Mr. Williams and sent through course of mail to Mr. Podlesak. Plaintiff's counsel objected to the introduction in evidence of the letter as irrelevant and immaterial. Received subject to objection.

Thereupon HENRY J. PODLESAK, recalled on behalf of the defendants, further testified as follows:

Direct Examination by Mr. Peaks.

"Q You have heard the discussion here with reference to the draft of a form of agreement, which preceded the execution of the contract, between yourself and your brother and the Webster Electric Company, haven't you?

A Yes.

(Objection by plaintiff's counsel—overruled)

Q Did you see the one that Mr. Williams produced here yesterday, the typewritten one, with the pencil interlineations?

A Yes, sir.

Mr. Williams: We make the same objection.

The Court: It may be received.

Mr. Peaks: Q Were those your interlineations?

A No, sir.

(Plaintiff's counsel renewed its objection, and a discussion between counsel and with the court ensued.)

Mr. Williams: Let me ask you what was said between you and the court relative to that paper. Let us get that into the record.

The Court: I will state that. I asked Mr. Peaks whether he had found the papers, or found anything in them; and he called my attention to a certain interlineation in pencil, 957 and said he did not know who made it.

Mr. Williams: Well, your Honor saw what the interlineation was?

The Court: I did; but that is not on the record, and it is of no consequence, of any kind.

(Further discussion between counsel and with the court)

The Court: What was the last question and answer?

(The last two questions and answers were read)

The Court: Yes. Let it stand at that.

Cross-Examination by Mr. Frank.

(Without waiving objection to the relevancy of the testimony given.)

Q Do you remember that shortly before the opening of this trial, Mr. Fischel, Mr. Frederic Fischel, who has testified here, called you on the telephone?

A Do you mean shortly before this case opened?

Q Yes.

A Yes, sir.

Q And did he have a conversation with you relative to the magneto contracts of February 5, 1914?

A He asked me something about them, yes.

Q And did he refer to the drafts of contracts that were submitted by you to him, that led up to the final execution of those contracts?

A Yes, and he also asked me about a letter that he wrote to me sometime in January, 1915.

Q But did you not tell him then that you had now in your possession, or, at the time of that telephone conversation, in your possession, certain of the drafts that were made that led up to the final contract?

A I told him I may have,—I did not know whether I had them or not.

Q You did not tell him that you then had them?

A No, sir. I told him I had the original, but not any
958 of the drafts.

Mr. Frank: Will you repeat that?

(Answer read)

Q Have you still those copies of the originals?

A Yes, sir.

Q And by the originals you mean those that were finally executed with the signatures of both parties?

A Yes.

Q And you did not tell them that you had any drafts that you made in longhand and submitted to him?

A No, sir.

Mr. Frank: That is all.

Redirect Examination by Mr. Bulkley.

Q Mr. Podlesak, is it your recollection that any drafts were made, and presented to you by Mr. Williams, or Mr. Fischel?

A Yes, there were—

Q Several of them?

A Several of them.

(Objection by plaintiff's counsel. Objection sustained.

Further discussion between counsel and with the court)

Mr. Williams: We move to strike out all of this testimony of Mr. Podlesak, for the reason that our testimony was stricken.

The Court: Motion denied.

Thereupon JOHN LEWIS MILTON resumed the stand for further cross examination, and identified a letter and a telegram received by him from Mr. T. K. Webster, the letter being written in long hand by Mr. Webster from Tiffin, Ohio, and dated September 9, 1908, and the telegram having been sent to New York May 7, 1909, and both received by the witness in due course. They were offered in evidence by plaintiffs' counsel as Plaintiff's Exhibits 74 and 75 respectively.

959 Plaintiff's counsel renewed his objections to Defendants' Exhibits Nos. 55, 56, 57, 58, 59, 60, 61, 62, 63, 64

and 65 on the ground that they were inadmissible to limit or restrict the scope, or to raise the question of validity, of the claims of the patents in suit, and upon the ground that they were irrelevant and immaterial for any other purpose. The court ruled that they should be received subject to objection.

Thereupon H. G. WEBSTER recalled on behalf of plaintiff in rebuttal, testified as follows:

Direct Examination by Mr. Williams.

960 Q You are the H. G. Webster, are you not, who was previously sworn, and who previously testified in this matter?

A I am.

Q You heard, did you, the testimony given by Mr. Carter, on behalf of the defendants?

A Yes, sir.

Q At the conclusion of his testimony Mr. Carter said: "I think I should like to say, before leaving the stand, that on thinking over this proposition of use of the coil in connection with this ignition device, that a coil would not and could not be used in connection with the make-and-break battery ignition; leastwise, I do not now see how it would be possible."

Will you state whether you agree with Mr. Carter, that a coil would not and could not be used, and give the reasons for your answer?

A I disagree with the statement—

Mr. Mason: May It please your Honor, I think it is perfectly obvious that Mr. Carter was talking about the double-wound induction coil.

The Court: Surely he was; he was talking about the double-wound coil, large and small wires, and not talking about the coil, such as the one that was produced here. If you want to ask the question, as so changed, why, go ahead.

Mr. Williams: Well, I have quoted the answer, as it stands in the record.

The Court: Yes, but he was talking about that kind of a coil.

Mr. Williams: Q Well, do you agree with Mr. Carter that

an induction coil would not be used in connection with
961 make-and-break battery ignition,—that is, an induction
coil with a coarse winding and a fine winding, and a
vibrator, or other means for interrupting the current supplied to the coarse coil.

A Such an induction coil, having a coarse wire winding and a fine wire winding, and operated by means of a few cells of battery, as, for example, a six volt battery, is the type of coil which is ordinarily employed for jump spark ignition, with batteries.

The Court: Q How is the battery attached to the magneto?

A You do not use such a coil actuated by battery with a magneto.

Q Well, I mean with a battery. I misspoke.

A Using a battery, and a jump spark induction coil, the battery is connected in circuit with the coarse wire winding of the coil, and with a vibrator, which is actuated rapidly by the core, magnetized core of the coil, and the entire circuit is opened and closed by a circuit breaker carried on some moving part of the engine.

Q And what is the result?

A The result is that when the circuit is closed, through the coarse wire of the coil, there is a rapid vibration, which causes a succession of sparks to flow across the terminals of the spark plugs in the cylinder.

Q The voltage is stepped up?

A The voltage is stepped up, to a very high value in order to jump the open break at the terminals of the spark plugs.

Q A very small current?

A The current value is low.

962 Mr. Williams: Q Now, when a make-and-break igniter is employed, with battery, will you state whether or not any kind of a coil is employed, and, if so, explain why, using if you like, the battery and coil which were introduced in evidence yesterday as Plaintiff's Exhibits Nos. 72 and 73?

A With a low tension make-and-break ignition system, the almost universal practice is to use a few cells of battery, giving a current, as Mr. Carter said, at about six volts, and with such a battery, and in such a system it is essential to employ some sort of a coil in circuit with that low voltage battery. The reason for that can best be illustrated by using the batteries and spark coil which were used here yesterday.

The Court: Yes.

A I now take the four cells of dry battery which were used yesterday afternoon in connection with Mr. Carter's cross-examination, and will show to the court the effect of closing the circuits of these batteries, in the absence of the inductance coil, or kick coil, which is ordinarily employed in a low tension battery, make-and-break ignition system. It will be observed that when these terminals of the wires leading to the outside ends of the battery circuit are touched together, and separated, that there is but a slight spark.

(Witness demonstrates.)

Mr. Williams: Q Would that be enough to effect ignition of an engine?

A A spark that could not possibly ignite the charge in an engine cylinder. I now connect in circuit the kick coil, or inductance coil, as it is more properly to be called, in circuit, and now close the battery circuit, and the spark which is produced is in the nature of a flaming spark, one which obviously would give good ignition. The reason for the difference in the character of the spark present when the kick coil is in circuit involves some little explanation of the physical
963 characteristics of this coil, and of electro-magnetic action.

Q If, as you go along, Mr. Webster, you can point out any analogies applicable to the operation of magnetos, you may do that, if you find it convenient.

A There is a direct analogy, which I will explain as I proceed. When the circuit of this battery, or any battery of about this voltage, is closed through the coil, the current does not instantly rise to its full value; there is a period during which the current is gradually building up to the steady value, which is the result of the voltage of the battery, and the ohmic resistance of the coil. This transition period, while brief, and to be measured possibly in hundredths of a second, is a definite period. The reason for that gradual increase in current value is to be found in the presence of the iron core of the coil, and in the fact of the layers of winding which are wound around the coil. When the circuit is first closed, the current flowing through the coil tends to magnetize the iron core: that magnetization of the iron core produces a reactance, which tends to prevent the increase in current value, and that is a progressive action, the magnetization resulting from the core in its turn opposing the building up of the current, resulting in the fact that a time interval is required for

the current to reach its final value. The same characteristic is true with respect to a decrease in magnetization of the core. When the circuit is broken, or if it be attempted to reduce the value of the current flowing through the coil about the iron core, the magnetization or the magnetic energy stored in the iron core tends to cause the current to persist, the result being that when the circuit is broken at the terminals of the wire, as I just did, or at the terminals of the igniter in an engine cylinder, that break acts somewhat as the opening of a valve, which allows a sudden and considerable change in the magnetic condition of the core, resulting in the intense flaming spark which you saw.

(Witness demonstrates.)

A To put it another way, the building up of the current value in the coil, and the magnetization of the iron in the core of the coil, stores energy in that coil, and the breaking of the electrical circuit releases that energy all at once, and the effective spark is the result of the energy previously stored in the iron.

And, as the court has seen, in the absence of that iron-core, that same steady current value produces a spark which is obviously ineffective. It is because of the iron in the core, and the windings around the core, by means of which the core is magnetized, that the breaking of the circuit results in an effective spark.

There is a direct analogy, or rather, as I say, an analogous condition, in one of these magneto generators which we have been talking about. As the inductor or armature of the magneto generator is moved within the magnetic field, there is a change in the magnetic condition of that portion of the iron within the windings or encircled by the windings, as a result of such motion.

That change in magnetic condition tends to build up current in that winding, but that current reacts, and opposes the magnetic change, and likewise the motion which produces that magnetic change. Possibly I can emphasize that by showing to the court the difference between the opposition, which is met in a magneto machine, with the circuit open, and closed.

I think I have here a magneto of substantially the same character as is used in these magneto ignition systems, this, by the way, being one which has been used for testing out electrical circuits, and other purposes.

(Witness produces a model).

A If I can get your Honor to turn the crank, you will see how easily that turns, and if you will turn it fairly rapidly, so as to get a voltage, you will see that closing that circuit immediately increases the force required to turn it.

(Model demonstrated.)

A That is one of the effects of the reaction between the magnetic change and the current produced by the magnetic change, and in these ignition magnetos the presence of that reactive effect accounts for the lag in phase of current with respect to the motion of the inductor or armature. It is the effect of the interval which is required to build up electrical current, or magnetization, in the presence of a closed circuit coil encircling the iron in which the magnetic changes are to be effected; and the spark which is secured from one of these magneto machines is dependent upon the time at which this electrical circuit is broken, with respect to the condition of the iron about which the winding of the magneto is wound.

In other words, to get an effective spark, or to get the best spark, the one which will give the maximum power of the engine, that break must occur at the time when the iron encircled by the winding is in a condition and position such that it will give the most sudden and considerable change in magnetic condition, and the ignition spark is not the spark resulting from the breaking of a half ampere, or of one ampere, or a five or ten ampere current, but is a spark resulting from the sudden and considerable magnetic change in the condition of the iron within the coil.

Mr. Williams: To what extent, if ever, is a sixty or 966 eighty or one hundred volt source of current used in connection with a make-and-break igniter for gas engine ignition, as was referred to, I think, by Mr. VanDeventer in his testimony yesterday?

A Of course I do not know just what Mr. Van Deventer had in mind when making that statement. I have heard of isolated individual instances in which current was supplied to a make-and-break igniter by connection to an electric light circuit, or a large storage battery, which would give some such voltage as that, and in which was included a lamp or some other device to control the excessive flow of current, which would otherwise result, but the almost universal practice, with these low tension make-and-break battery igniters,

is the use of a low voltage battery, and a kick coil, such as I have just demonstrated.

Q You heard Mr. Carter's testimony relative to his understanding of the disclosure of the Weber patent, and saw, did you, the defendants' Exhibit No. 52 apparatus, which was introduced in evidence in that connection?

A I did.

Q Will you state whether you agree with Mr. Carter, in your understanding of the disclosure of the Weber patent, and in so doing state the reasons for your answer?

A I do not understand the disclosure of the Weber patent as Mr. Carter seems to have done; and I think I can best emphasize my understanding of the patent by reference to another model which I brought over here this morning.

(Witness produces a model.)

A This model to which I refer is one, I understand, which was built for and used in connection with one of the interferences in which the patents here in suit have been involved; and to illustrate just what this represents with respect 967 to the disclosure of the Weber plant, I will proceed to do what would have to be done in removing the Weber device from an engine with which it was associated.

Q Mr. Webster, in order, perhaps, to save time, later, may I suggest that you operate this apparatus before you (indicating)?

A I had intended to do so.

(Witness demonstrates.)

A The court will observe that this is operated by a pusher attached to the engine, and that when it is operated it trips and makes a spark at the sparking electrodes, just as the Weber patent describes.

The Court: Just as this did, too (indicating)?

A And just about the same sort of spark that the previously presented model produced; and to show the relation of this device to the engine, I will first remove the igniter block. I have now removed the two bolts which hold—the two lower bolts, I should say, by means of which the igniter block is held to the engine cylinder, and, in doing so, the shelf upon which the magneto is mounted comes away, at the same time. The removal of the third bolt allows me to remove the igniter block itself. The bracket, which I think is called thirty-one in the Weber patent, still remains on

the engine; and to remove this portion of the Weber device necessitates the removal of two more bolts.

(Witness demonstrates.)

A We now have the Weber device model, as in the condition in which I understand it would be when removed from the engine cylinder; the igniter plug is one piece; the bracket or shelf, containing the magneto, is another piece; and the spring driving, or, actuating spring, with its supporting bracket, is the third piece. It is, as I understand it, 968 really a three piece device, and one which it is obvious, if made in this way, cannot be operated if removed from the engine in the way in which it is operated when on the engine.

I would like to call attention, also, to the igniter block itself, in comparison with Figs. 2 and 3 of the Weber patent drawing.

It will be observed that, looking at the front of the igniter block of this model which I have produced, it corresponds exactly to Fig. 3 of the Weber patent drawing, and that the backside likewise corresponds exactly, except that the hole which supports the spring post does not go clear through; and, as I understand these drawings, the holes through which the bolts pass for screwing the igniter block to the engine cylinder are illustrated in that patent as smooth holes; and my understanding is that the bolts go clear through, and into the engine cylinder, as they must, if we are to have any packing or other means for making a gas-tight joint.

The Weber patent does not disclose a tapered plug, or one which can be in any way held in place by means of a single bolt, as in the model which Mr. Carter produced.

Q What pressure is developed, in a gas engine cylinder, at the time of the ignition of the charge?

A Oh, at the time of the ignition of the charge, the explosion pressure will range up to two or three hundred pounds, a pressure which would blow out a gasket, if not secured by three bolts, as illustrated in the Weber patent.

Q What, in your opinion, would be the result of the development of such a pressure as two or three hundred pounds in the gas engine cylinder, in so far as its effect upon the integrity of the igniter block is concerned, provided it were bolted with a single bolt; in other words, would the igniter block such as is shown by Weber, if attached with a single

bolt, would that withstand without breakage the pressure 969 developed in the engine cylinder?

A It would not only be liable to break under the explosion pressure, but it is extremely doubtful whether a suitable degree of compression could be secured if the Weber igniter block were fastened with a single bolt.

Q Why is that?

A Because to hold the packing in place it has got to be supported, the block has got to be supported and clamped against the engine cylinder at more than one point.

Q As removed from all reference to the engine cylinder in this model of the Weber apparatus which you have presented will you state whether or not there is any possibility of a hand operation of the magneto igniter equipment so as to produce or test any spark at the electrodes.

A No; there is no such possibility with the device disconnected from the engine, because of the fact that the magneto when disconnected is wholly disassociated from the igniter apparatus.

The Court: I think I could answer that myself. That is where there is no unitary structure.

The Witness: Where there is no unitary structure.

Mr. Williams: Now, in how many pieces was defendant's Exhibit 52 dismantled or might it be dismantled from the engine cylinder; that is the model constructed in accordance with Mr. Carter's alleged understanding of the Weber patent?

A In the defendants' model to which you refer the removal of the magneto and igniter plug from the engine and the removal of the driving spring for actuating the magneto from the engine would be in the nature of a two-piece disassembling; in other words by removing the igniter plug and magneto you have removed one piece, and by removing the driving spring with its supporting parts you have removed the second piece. It is a two-piece arrangement rather than a three-piece arrangement as I understand the Weber patent to disclose.

Q As Mr. Carter demonstrated the number 52 apparatus you saw him did you not effect a hand operation of the magneto and electrode part which he removed from this supporting member representing the cylinder upon the removal of the single bolt. You saw that did you?

A Yes sir.

Q Will you explain whether the hand operation of that

much of the apparatus of this defendants' Exhibit 52 can be made to duplicate practically or effectively the operation which would be secured with the apparatus mounted upon an engine cylinder and at the same time connected with the driving spring and push finger on the mechanism of the Weber patent; and give the reasons for the answer?

A No. The sort of hand operation which Mr. Carter made of Exhibit 52 magneto, and similarly of the model Wattles magneto which he had, is not such an operation as takes place on the engine and is not an operation which would indicate the character of spark to be expected when the device is mounted on and operated with the engine cylinder.

The reason why this is so involve some further explanation of the physical characteristics of these devices.

In the first place a hand operation, that is twisting the armature by hand, does not at all reproduce the velocity of movement which is secured with the driving springs by means of which the machine is intended to operate. Such hand operation is one necessarily of irregular velocity and cannot approach the speed which you get with the driving springs.

One result of this manual velocity is that you do not get at the time of breaking the contact when operated by hand the same phase relation between the current and the movement of the inductor which is present when it is driven at the high rate of speed resulting from the driving springs, and that difference in phase relation has a very decided effect upon the character of the spark produced.

971 Another reason—

Q Before you go to that, are you speaking there of the phase of the current, or the mechanical phase?

A The phase of the current impulse with respect to the mechanical movement of the inductor or the armature.

Another different resulting from the lack of operating velocity, when under hand operation, is that you do not get the voltage which is to be expected and required when driven at the high speed by means of the driving springs.

The Court: Can you make any estimate of the difference?

The Witness: Under hand operation the spark voltage might be only ten per cent.

The Court: Of the other?

The Witness: Of the other. And it might be fifty per cent. It depends entirely upon the characteristics of the

device. But it is not what you would get, and does not approach what you would get, under normal operating conditions.

The Court: Mr. Carter called it a fat spark.

The Witness: That is one of the terms commonly employed to express the appearance of what is understood to be a good and satisfactory ignition spark; that is that sort of flaming or radiating appearance which you get with the generating of a good spark. The term is "a fat spark."

In illustration of the result of inadequate voltage under manual or hand twisting operation I might point out what results in case the spark plug or the igniter terminals are partially short circuited.

The court will probably recognize that in a device of this kind in operation there will be a collection of carbon, carbon dust, about the insulated electrode, which tends to form a circuit leading directly to the iron of the cylinder rather than through the movable electrode. And when one operating an engine of this kind takes the plug off the cylinder, in case 972 the engine fails, or he thinks he is not getting a satisfactory ignition, it is of considerable advantage to determine whether or not there is such a partial or complete short circuit present.

It follows that if the device is operated by hand, as Mr. Carter operated the Weber model or the Wattles model, that if there is a partial short circuit thereunder hand operation, and at low voltage resulting from hand operation, there may be a sort of spark produced at the igniter terminal in case of a partial short circuit, for the reason—

Q What is the reason? Why is that?

A I was going to explain. For the reason that with the low voltage, resulting from hand operation it is not sufficient to jump across these particles of carbon. While at the same time if it is operated by the normal driving springs, and at the speed which would result from the normal operation of the engine, the voltage may be such as to bridge or jump across these particles of carbon and prevent the formation of any effective spark at the electrode contacts. In other words it may look, under hand operation, as though you are going to get a spark in the presence of a partial short circuit, but when operated at the speed and voltage which results from operation with the engine you will be getting no effective

spark at all; you will get the effect of the partial short circuit which will practically kill the ignition.

The Court: You mean you could see a spark in the case of this short circuit you spoke of, off the engine, which is not really an effective spark when it gets back on there?

The Witness: That is entirely possible. That is what I mean.

The Court: In other words you will be deceived by that kind of examination.

The Witness: Yes, just as you are deceived by the presence of the spark under hand operation which by reason of 973 the difference in phase under spring driven operation does not indicate the presence of an effective spark when driven by the engine, by the driving spring, on account of the difference of phase relation under those two methods of operation. The fact it presents some sort of spark does not indicate satisfactory ignition, when you are operating it off the engine. It has got to be something more than a faint spark. Some time it is hard to tell whether the spark which you see is going to be a satisfactory ignition spark, which will give the maximum power from the engine, unless you can know that you are operating under the same conditions with it off the engine, when you are looking at the spark, as it is when operated on the engine and the spark is within the cylinder.

The hand operation of course also involves a different angular movement from what you get when it is operated by the engine. The range of angular movement is apt to be quite different—

Mr. Williams: Q The angular movement of what?

A Of the inductor or armature. When you operate it by hand you have to start it away back, to give it a quick flip and you can get some sort of spark with almost any magneto. But there you have given a different angular movement of the inductor or armature and the spark which you may get is not an indication of what you may expect when the thing is operated on the engine.

Q You heard Mr. Vandeventer's testimony yesterday afternoon, did you not, relative to the extent and practical effect of a change in the current phase relationship under hand operation, as compared with the normal spring operation. Do you recall his testimony, the substance of his testimony?

A Yes, I remember that Mr. Vandeventer recognized that

there was a change in phase relation under hand operation as compared with spring operation.

Q Won't you explain briefly the reason for that change in phase relationship under the different conditions of operation, and state whether or not you agree with Mr. Vandeventer as to the practical effect of the difference in electrical phase under the two conditions of attempted operation? If you have any data or diagrams that will simplify your explanation we shall be glad to have you use them.

A As Mr. VanDeventer expressed it the change in phase relation, under the change in velocity, is due to the reactance between the closed circuit coil about the iron of the magnetic field, of the magneto, and the iron itself. As I have explained, by reference to the spark coil it is the resultant of those opposing actions of the magnetic change upon the electric current, back and forth, which results in a gradual building up of current value, or a gradual change in magnetization.

This reaction in a magneto takes place as the inductor or armature is revolved within the magnetism field, and it will be obvious that as this current change, and magnetic change is a gradual action—that as the speed of swing or of revolution of the inductor is increased that the current impulse or current wave resulting from that change will lag behind the mechanical motion of the armature or inductor.

The result of that lag in phase is more important than Mr. Vandeventer seemed to believe and I can best illustrate that I think by reference, first, to an oscillogram made by me of one of defendants' type B Machines.

This oscillogram to which I now refer is entitled "Oscillogram B, defendants' device Type B," and I produce at the same time the photographic film from which this oscillogram print was made.

This photographic film was produced through the operation of one of defendants' type B devices.

Referring to the oscillogram print, and first to the upper line marked *m*, point *i*—that point indicates the point at which the trip finger in this test was engaged by the push rod of the engine.

975 During the time interval represented by the space extending from point 1 to point 2 the armature was being moved against spring tension to the cocked position. At point 2 the trip finger is released from the push rod and recoils or flies back to make the current impulse which is to be utilized for the ignition spark. The time occupied by that

recoil is represented by the space extending from point 2 to point 3, point 3 being the point at which the operating arm of the electrode is engaged by the striker of the yoke connected with the armature, to cause the separation of the electrode contacts.

The center line T is a time line used as explained in my direct testimony to serve as the means of calibrating the time value on the film and calculating the time occupied by the several events recorded on the film.

I explained in my direct testimony that this center curved line was produced by current from a 60 cycle alternating source of current, and therefore each cycle—that is each complete double swing, represents on the film one-sixtieth of a second; and it is by means of this curved time line that I am enabled to calculate the time intervals involved in these operations.

The lower curved line represents the current curve resulting from the operation of a type B magneto under the condition in which, instead of closing the circuit of the magneto through the spark electrodes, it was closed directly, in order that the continuity of the current curve should not be interrupted by the separation of the electrodes.

And one purpose of this film was to compare the current curve produced by that machine with the times of engagement of the trip finger, the release of the trip finger and 976 the separation of the electrodes, in order to determine at just what point in this current curve the most effective spark ignition could be secured.

The lines bearing current values in amperes indicate the point in this curve at which separation of contacts may occur in this Sumter type B magneto.

The upper line, crossing the curve, bearing the character .231 amperes, is the current value at the instant the contact electrodes are separated with the device in its normal operating condition, using new electrodes.

I will explain by reference to another chart that the wearing away of the electrodes causes a change in the time at which the operating arms of the electrodes are engaged.

The lower line represents the current value which will have been reached under the assumption that the electrodes are separated at the instant the rotor or inductor of the device passes through the vertical or neutral point; that is this lower value line indicated as .046 amperes is the value which

the current curve has reached at the time the yoke of the device stand exactly vertical in its recoil after being released.

These two lines, recorded as .046 amperes and .231 amperes, represent the angular movement of the rotor or inductor through fifteen degrees.

In other words if the circuit through the contact electrodes is by the operation of the device broken when the yoke piece stands exactly vertical or at zero degrees, the current is then broken at the lower value. With the adjustment such that it is broken at the end of its swing as the device is normally arranged the current wave is then broken where it has reached the value of .231 amperes, and that is 977 at the end of the angular movement from the vertical to about 15 degrees.

Therefore, this upper and lower current value line represents the point on the curve of current, or the space on the current curve within which the most effective spark for ignition is secured.

Experiment has shown that within this space there is a space of four degrees within which the maximum power of the engine is secured.

I find by experiments with this same device by means of the Prony break test on a Fairbanks-Morse engine equipped with this Type B magneto, that the maximum output of the engine is secured when the breaking of the contacts occurs at six degrees from the vertical, considering now the angle which the yoke or spring gripping member makes, to the point where the break occurs at ten degrees. There is a space from six to ten degrees of angular position within which the maximum power of the engine is secured, and as the break occurs on one side or the other of that four degree space the power of the engine falls off to a degree of ten or fifteen per cent. and if you went far enough it would fall off to a greater extent.

I refer to another chart which I have had made showing in diagram the various angular positions of the yoke which occur with the type B device.

It will be noted that I have shown at E the operating arm of the moveable electrode in full lines in the position which it is in when the contact points of the electrodes are new and not worn down, and adjacent thereto, in dotted lines, the position which this operating arm assumes when the contacts are worn to their extreme limit or nearly so.

978 In other words you will observe that as these contact points wear away the arm of the moveable electrode which is within the engine cylinder gradually changes position so that when at rest, as the contacts wear, the outer operating arm of the moveable electrode rests normally nearer to the striker of the yoke member; and that range of position of the electrode arm is such that when the contacts are in their normal new condition the striker of the yoke engages the operating arm of the moveable electrode. When the yoke is at an angle of fifteen degrees. The dotted curved lines which I have shown between the strikers and the electrode arm *e* indicate the angular position corresponding to the angular positions of the yoke. In other words I have shown at the upper side of the yoke lines bearing degree indications and the extreme line to the left, marked "15 degrees" indicates that the yoke has a fifteen degree angle from the vertical at the time its striker is engaging the electrode arm *e* under the condition of new and unworn contacts.

Similarly the line marked "4 degrees" indicates that when the striker arm is engaging the electrode arm under the condition of worn contacts that the angle which the yoke then has is four degrees from the vertical.

So that corresponding to the wear of the contacts the striking position works over a range of four degrees, to 15 degrees, or eleven degrees; and that represents the range which would be indicated by a line somewhat above the lower current value line indicated as .046 amperes on the oscillogram that I have made reference to.

This lower line as I stated before is the current value present when the break occurs with the yoke arm exactly vertical.

979 As this is not the condition reached in practice, the range and practice instead of being fifteen degrees, as I have indicated on the oscillogram by the upper and lower current value lines—instead there is only a range of eleven degrees because the electrode arm cannot assume a position such that the striker will engage it when in the zero degree or vertical position.

And the Court will understand that this same angular variation at the different striking positions which I have indicated with respect to the yoke applies likewise to the angular displacement from normal of the inductor to which the yoke is secured.

To come now to the question of the effect of a change in phase relations—

Q Before you do that could you just indicate on this defendants' Exhibit B apparatus just what you mean when you speak of the range within which operation can be secured and so on. I don't mean to make the explanation elaborate, but simply to point here to the parts and without attempting to get the degrees exactly, with your hand just indicate what you mean by the range of operation

A I think I can show this best by temporarily removing the magneto itself from the bracket. (Witness does so.)

Looking now at the bracket with the magneto temporarily removed it will be seen that the parts now exposed correspond in position and dimensions to the chart which I have referred to, and which chart is marked "Diagram defendants' device Type B illustrating angles of striking."

This chart is drawn twice the natural size; that is two inches on the chart represents one inch in the actual device.

980 It will be observed that the rotor arm, or rather the operating arm of the electrode, is in the position just as shown in the diagram and that the yoke with the two pins to which the driving springs are attached stand normally in the vertical position. It will also be observed that when I turn this yoke by hand in the direction of the operating arm of the electrode that it has to be turned through about fifteen degrees in order to engage the operating arm of the electrode and separate the contacts. And this dotted curved line, or those dotted curved lines, bearing the marks, four degrees, six degrees, ten degrees and fifteen degrees, represent various angles at which the electrode arm may be struck by the striker in the operation of the device, the four degree point being the point at which the striker arm will engage the electrode arm, assuming the contacts to be worn down about as indicated by the dotted lines in the chart to which I have referred; and therefore the operating range of this device is mechanically limited to a range of eleven degrees of angular position.

Now referring to that angular range I should also state that experiments have shown that when attempting to start an engine with this magneto under favorable conditions, that is with a good mixture, the engine warm, and indoors, that the engine can be started by the spark from this machine over the entire striking range of fifteen degrees, that represents

the possible range, although the first four degrees are never secured in practice with the electrodes and electrode arms which are present.

It is further found, however, that when attempting to start the engine with this magneto under somewhat adverse conditions, that is outdoors, with the engine cold, that difficulty in starting is encountered when you get outside the range of four degrees, to about fourteen degrees—in other words if this striker engages the electrode arm when it is less than four degrees from the vertical and when the inductor is correspondingly out of normal position we get difficulty in starting due to the poor quality of the spark; and that at the same time, under similar adverse conditions if we attempt to start the striking at an angle of fifteen degrees we get a difficulty which is not present when striking at an angle of about fourteen degrees, and there again it is a matter of the quality of the spark in its effect to ignite the charge of the engine when the engine is cold or possibly with a poor mixture.

That is merely one more illustration of the fact that you not only have to have a spark, but you have to have a good spark.

Q What does it indicate in that connection as to the necessity of maintaining a given adjustment or relationship as between the parts?

A Well, that goes back to what I said in my direct testimony that one of the advantages of the unitary device is to make it what I have called self-synchronizing; in other words, when put together with the unitary frame for which it is intended it assumes the correct relation between the magneto and the electrode contacts and maintains that relation, when on the engine and when off the engine, and produces a device which can be taken from the engine and operated at the same velocity and in the same operating manner as when on the engine and allow observations of the spark under actual operating conditions so far as the relation between the generation of the correct and the breaking of contacts is concerned.

982 Now, to go back to this question of this phase relation, and referring to Diagram B, defendants' device Type B—

Q Are you going to take up now the question as to how the phase of the current is changed?

A I am proposing to show why the change in phase relation even though it may not be a very considerable change in

terms of degrees, nevertheless, is a more important factor than Mr. Vandeventer seemed to believe.

I think that will be recognized by reference to this diagram showing the current curve produced by the machine.

I have pointed out that the point in the current curve at which interruption of the circuit will produce the most effective spark is a point, or a space of very limited range. That is to get the maximum of power from the engine you must work within a four degree range of angular variation, and that represents but a small space up and down in the current curve, or change of value in the current curve. And I pointed out to get the most satisfactory starting you must work within a range of four to fourteen degrees, or a space on this curve which may be represented by something less than a quarter of an inch, on the vertical line of the current curve, line C on this diagram.

It will be recognized that by reason of the rapidly rising characteristic of this current curve that a very slight change in phase relation will throw the time of breaking the contact entirely outside of this most effective breaking point.

For example if we were to add to this diagram another curve representing the current slightly advanced in phase over that which is shown it will be seen at once that a very slight difference in phase will have the effect of throwing the breaking point of the electrodes or the time of breaking the electrodes entirely outside of this most effective point or range to which I have referred. A change in phase relation of ten or fifteen degrees might have the effect of making the difference between an effective spark and one which would not deliver the maximum power or would not even effectually start the engine under somewhat adverse conditions.

Q Now can you state whether there is such a change in current phase as between spring operation and hand operation, and indicate why? And if you can whether the degree of change in current phase relationship as between spring operation and hand operation would be such as to destroy the indication as to spark effectiveness.

A There is necessarily a change in phase relation of the current wave with respect to the breaking point of the electrodes as between hand operation and spring driven operation, for the reasons which I have stated. And it is my view that this change in phase relation is such as to make the spark which is secured by hand operation an entirely unreliable in-

dication of the character of spark to be secured under spring driven operation.

This conclusion is based not only upon reasoning and analysis and experience but upon experiments which I have made to show the effect of such change in phase relation with change in velocity.

Mr. Williams: We offer in evidence the Weber apparatus, the Weber model as produced by this witness and ask that it be marked "Plaintiff's Exhibit No. 76"; and that the oscillogram produced by the witness be received in evidence, and that it be marked "Plaintiff's Exhibit No. 77." We also offer the chart referred to by the witness and entitled
984 "Diagram defendants' device Type B, illustrating angles of striking" and ask that that be marked "Plaintiff's Exhibit 78."

(Said exhibits were then received in evidence, marked respectively "Plaintiff's Exhibits 76, 77 and 78", and said exhibits 77 and 78 are as follows, to-wit:

Q Will you now refer to the Wattles patent 909264, and explain briefly the purpose and effect of the spring mechanism connected between the cam marked 3 in Fig. 1, and the magneto itself, and state what the effect of this spring and cam operated mechanism is; and whether there is shown in the Wattles patent a unitary magneto igniter equipment in any sense, or in any such way as to enable it to be removed from the engine and operated under conditions simulating those of engine operation?

A Referring first to Figs. 5 and 6 of this exhibit, patent 909264, the Wattles patent, it should be explained that the actuation of the magneto under gas pressure, or under the compression pressure of the charge in the engine cylinder, is intended to be controlled by means of what is described as a valve device, 21. As long as this member, 21, is in its seat in the chamber within which it moves, the gas pressure is presumed to be ineffective to operate the magneto. The spring 55 and the linkage represented in Fig. 1 forms a flexible connection between the cam rod 56, and the upper links which are used to move the magneto, with its actuating plunger and valve member, 21, to the seated position, that is to the position in which it must be before being operated by the pressure of the charge in the cylinder.

Under this seated or set condition the spring 55, as I understand the device, exercises some slight pressure where-
985 by the valve member, 21, is maintained in its seat. When

the valve rod, 56, is dropped or moved downward, through the action of the member, 3, in its rotation this slight spring pressure is relieved sufficiently to allow the pressure of the gases in the cylinder to act with the intention that the plunger or piston, 19, will then move outwardly rocking the magneto armature with sufficient accuracy and velocity to create a suitable spark for igniting the charge. This linkage, including the spring, 55, and the bell crank, 45, 48, with connecting members 44 and 43, is thus an essential part of the ignition device. And because of this it is obviously impossible, of course, that the device could be operated when removed from the engine cylinder in any such way as it is presumed to operate when in place on the engine cylinder.

Furthermore it is of course obvious that when removed from the engine cylinder the absence of any connection with the compressed charge in the cylinder renders the device devoid of any driving means whatever for causing its spark operation.

For these reasons I regard the device as one which is not in any sense a unitary magneto ignition device, such as is the device of the Kane patent in suit.

Q Where do you understand that the parts shown in this Wattles patent at 45, 48, 52, 55, 58 and so on, would be mounted when attempting to equip the engine with this mechanism?

The Court: I don't care to spend much time on this patent. It has an entirely different mode of operation.

The Witness: As indicated in Fig. 9 of the Wattles patent, the part, 51, that is the downwardly extending rod carrying springs 58 and 55 is slidably supported in a bracket

bolted to the engine cylinder or frame at one point, 986 while the bell crank member with associated levers, 44,

43, 45 and 48 are supported on the boss or pin indicated at 46, as found on the engine cylinder at another point.

Q Mr. Carter in his testimony, in referring to the Milton patent, 1053107, and to the Hennig patent, 916312, said among other things that if the magneto shown in the Milton patent, or if the magneto shown in the Hennig patent were mounted on the shelf, were bolted on the shelf of the Weber patent, instead of the style of magneto which Weber actually shows, then without any change whatever in the mode of operation the device would not only have a unitary feature as to the magneto proper and the ignition block, but would have the self-contained spring arrangement. Can you find in these

patents anything which shows or suggests such a substitution?

A I find that I have no copy of the Milton patent at hand.

The Court: What is the number of it.

Mr. Williams: 1053107.

The Court: Here is a copy.

The Witness: Will you read the question please.

(Question read)

Mr. Williams: Or how it could be made. I think I will add that.

A I cannot, but on the contrary the Milton patent and the Hennig patent to which you refer are directed to and suggest quite the contrary arrangement, that is one in which instead of securing direct engagement between the striker arm rigidly related to the magneto and an operating arm upon the moveable electrode, they instead point to and necessarily imply the older type of device in which there is a connecting rod extending between the rotor of the magneto and the operating arm of the electrode and in which the ignition block and magneto are located at entirely distinct and separate places with respect to the engine structure.

987 Q Mr. Carter during his testimony referred to the patents of Olds, Cooper and Dickinson, showing battery igniters, and said: "Now I do not know that it is particularly worth while to go into the details of these three patents. They simply show different styles of battery ignition devices which correspond with this plaintiff's exhibit defendants' machine Type A, when the magneto is removed from it, and they show devices to which a magneto might be applied just as a magneto can be applied to plaintiff's exhibit defendants' machine." Will you state whether there is in these patents anything to suggest the application or the substitution of a magneto, or anything to suggest how it could be done; and you might go on and state whether such a magneto could be applied to these devices in so far as you can see.

A No one or any of these patents, or all if them suggests such a unitary magneto ignition device as is disclosed in the Kane patent in suit. They are merely the old battery ignition device used for many years, and long prior to the Kane development.

Mr. Carter did not indicate in what manner it would be possible to unite the magneto generator with any one of these

devices and I see no way in which it could be done without a very material change in what is disclosed in them.

It seems obvious that it would not be possible to attach any existing magneto to any one of these devices and secure a unitary arrangement by means of anything suggested in any one of these patents or without an entire reorganization of the structure.

Q Do any or all of the prior art patents which were referred to during defendants' proofs, or offered in evidence by the defendants, disclose or suggest the Kane invention in a structure, mode of operation or result?

A They do not.

Q Will you refer now to Kane patent number 1204573 and explain your understanding of the disclosure of that patent as to an engaging surface between the striking part and the electrode arm?

988 A My understanding of the disclosure of this Kane patent 1204573, with reference to the point you mention has always been that the anvil member, 29, that is the broad-headed screw extending downward through the operating arm 27, and the moveable electrode, was engaged by a curved surface of the yoke member of the device. That understanding has been based I think particularly upon the fact that there are projecting portions, 30, of the yoke member, as illustrated in Fig. 2, which are clearly cylindrical in form and my understanding has been that this cylindrical contour extended to or beyond the point of engagement with the anvil member 29.

The Court: That is not very clear in the patent.

The Witness: The point of engagement is concealed in the drawings of the patent, but my understanding has been that these cylindrical members continued in cylindrical form to the point of engagement; and that I believe is a reasonable assumption.

Q Do you recall the substance of Mr. Carter's testimony upon the question as to whether defendants' machines, types A and B, disclose the subject matter of claims 2 and 3 of the Kane patent; and particularly his testimony relative to a difference in the place with which the ends of the driving springs were connected as between the defendants' device and the Kane patent; and also with respect to the pin and block connection between the yoke member of the rotating member of the defendants' machines and his comparison of the language of the claims with this defendants' structure.

A I think I have a fair recollection of his testimony on those points.

The Court: He practically admitted that it was only a difference of position.

Mr. Williams: You mean Mr. Carter.

The Court: Yes. No difference of function anywhere that I could see. He didn't talk about any. The only difference of function that he spoke about was in respect to some other change in the—

Mr. Williams: As I recall it he pointed out that in view of the fact that there was a joint or this connection between the rotor and the yoke member, that in this device, the defendants' device, the magneto could be removed in such a way as to permit what is left to be used for battery ignition.

The Court: Yes that was the only difference he suggested, the only different operation he suggested, when that change was made. That is all I recall.

Mr. Williams: Q Let me ask you this question, whether the fact that the defendants' magneto can be removed, as was just suggested here, alters in any way the function of the defendants' equipment in conformity with the subject matter of the claims of the Kane patent when the device is assembled complete with the magneto.

A Such possibility of the removal of the magneto from the shelf portion of the frame does not in my opinion afford a reason for concluding that there is any difference in the functional relation of the parts, when the magneto is in place on the frame over the functional relation and operation of the parts correspondingly found in the Kane patent.

The mere fact that a coupling has been introduced between the yoke member of the rotor and the armature of the rotor does not in my opinion change the function of the device so far as the Kane patent is concerned.

Q Will you say whether or not the same answer applies as to the different points at which the outer ends of the driving springs are connected?

A The same statement applies with respect to the manner in which the driving springs are supported. The essential relation in respect to these driving springs is that they shall be rigid with respect to the magneto itself and shall hold the rotor of the device in a predetermined position with respect to the field frame of the machine.

The fact is they are not directly connected with the field

magnets, that does not in my opinion make any difference so far as the claims are concerned.

Mr. Williams: That is all.

Cross-Examination by Mr. Mason.

Q Have you made any oscillographic tests on any other makes of machines than those made of the Sumter and Webster Electric Company machines, I mean in magnetos of this character.

A Other than those made by the Sumter, Splitdorf and Webster.

Q Yes.

A I don't now recall that I have.

Q You have not recently.

A No, not recently.

Q How many Sumter magnetos did you test in making the oscillograph test?

A Only the type B machine to which I have made references.

Q Only one machine?

A Only one machine of the Sumter Company.

Q Where did this machine come from?

A My understanding is that this machine was one purchased by the Webster Electric Company in connection with the purchase of the Fairbanks-Morse engine upon which the machine was mounted and for which it was furnished.

Q Is that machine an exhibit here in court now?

A I don't think it has yet been introduced as an exhibit, but the machine is here and I can identify it if you wish to have it.

Q It is not one of the exhibits, is it?

A Not yet.

Q Do you know that this machine is in the exact condition that it was when it was sold by the Sumter Company, the Splitdorf Company?

A Only by reason of my observation of its operation upon the engine for which it was sold. Its operation was such as to lead to the conclusion that it was in the same condition as when sold.

Q You do not know then that it is in the same condition as when it was sold, but you just infer that it was from the fact that it was on the engine with which it was sold.

A Perhaps it would be correct to call it inference. I observed that it operated as it would be expected to operate on such an engine.

Q You speak of the magnetic lag as being an element in determining the time when the moveable electrode should be open or separated from the fixed electrode, do you not?

A Yes, sir.

Q That lag is caused by the slow rise or change of the magnetism in the core of the coil, is that right?

A By the fact that the change is a gradual one rather than an instantaneous one.

Q How long a time elapses in the change in the period of induction—in a magneto I mean?

A I don't know that I quite understand what you mean or what you are referring to.

Q This change in magnetic force you say extends through a period of time. It is not instantaneous.

A The rise of the current is not instantaneous.

Q I have reference to the effect of the current—of induction on the current which is generated by the magneto, and to what is the maximum time that that induction takes, which I understand is a counter force set up in the core of the electric coil which affects the phase of the current, and you say that is not instantaneous but extends through a period of time. Am I right?

A Yes, sir.

Q How long a time is that about?

992 A That depends entirely upon the structure.

Q It varies in different magnetos, does it not?

A Yes, sir.

Q Is it thousandths of a second or a whole second, or what?

A For purposes of illustration I refer to this "oscillogram B, defendants' device type B." The change in the magnetic condition of the iron, which is I presume what you have reference to, is occurring throughout the return swing of the rotor as indicated by the period of time represented by the space between points 2 and 3 of this oscillogram. The time within which such change takes place is as indicated here a trifle greater than 10/1000ths of a second.

Q You are talking now about the current curve?

A No I am talking about the change in the magnetic condition of the iron.

Q Which causes the rise in the current curve?

A Which acting in conjunction with the current in the electric circuit causes the rise in the current curve.

Q Am I not right that the changes in the magnetic force through the coil produces this current rise and that takes a certain period of time?

A Yes.

Q That is what we are talking about.

A Those changes are opposed, or there is a tendency to oppose those changes by the current which circulates through the coil as the result of those changes.

Q Now in this oscillogram defendants' device type B, plaintiff's Exhibit No. 77, does the current curve there show any effect of the lag or this counter induction or counter force on the current curve?

A Certainly.

Q Any more than you have a regular form of curve there?

A The very fact of the form of the curve shows the presence of that reaction.

Q Sure, but it does not show just what the effect was, more than the resultant action? Isn't that so?

A I don't think I know what you mean. I don't think I get your point.

Q It is the magnetic force passing through the coil, and this counter force due to the induction that produces the current curve is that right?

A If I understand you it is.

Q There is nothing here to show where the lag begins to effect it, or where it ceases, or anything else, or what causes it?

A The oscillogram to which you make reference does not show a lag. It merely shows the position of the current curve with respect to the time of swing, and not a lag which would result from some different time of swing. The curve itself indicates of course that there is some lag between the time of starting the motion and the resultant current.

Q The effect of this lag or counter force varies not only in different machines but in machines of the same make does it not.

A It would be apt to, yes sir.

Q If I understood you correctly, the electrodes must be separated at pretty definite times in connection with the current rise as indicated by curves in the oscillogram?

A More strictly speaking at pretty definite times the

change in the magnetic condition of the iron of the device is indicated by the rise in the current curve.

Q In defendants' Exhibit 46-a, oscillogram of current curve of plaintiff's device, the current rise is very rapid to the maximum, is it not, and then drops off quickly?

A Yes.

Q And in the oscillogram, defendants' device, type B, No. 77, the current rise is more gradual and remains at the 994 maximum for a longer period of time, and then drops off; is that right?

A Viewing these curves as representative merely of current curves and without regard to the time interval or the angular interval throughout which a spark may be produced effective to secure best results in the operation of a gas engine, I should say that your statement was true.

But these curves show or at least indicate that the angular variation of position of the inductor as well as the time interval throughout which an effective or best spark can be produced is practically the same in the two devices.

Q Does not the curve of defendants' type B show that the time interval is considerably longer in which you can get an effective spark.

A You are referring now I take it to the entire interval occupied by the rise and fall of the current curve. I have pointed out in my direct testimony, or attempted to do so at least, that to secure an effective spark there was one certain position of the iron or condition of the iron as indicated, or as might be indicated on this current curve, at which the break must occur to secure the best and most effective spark. Now that position and the time involved and the angular variation involved is substantially the same as in the two devices.

Q Isn't it a fact that in defendants' type B they have done away with this adjusting screw to get this nicety of adjustment of time in opening the electrode with the movement of the armature?

A The very fact that they have done away with the adjusting screw is one of the reasons why it is most essential in that device that they should have a nicety of position of the magneto and its parts with reference to the igniter.

My investigations show that if you change the position of the magneto, or rather if you vary the position of the center about which the electrode arm rotates with respect to the

center about which the yoke rotates, either way cause a separation of these two centers or bring them closer together, as may be best seen by reference to this chart, diagram, device B, illustrating angles of striking, such variation will result in diminishing the effectiveness of the device.

Referring to this chart the actual horizontal dimension between centers to which I have referred is approximately .9218 inches. If that dimension is decreased it will be apparent that with worn contacts the striker of the yoke will engage the operating arm of the electrode before it has reached the four degree point, or the six degree point, at which the most effective spark is secured. On the other hand if that horizontal dimension is increased, as if the yoke were moved farther away from the operating arm of the electrode, you create a condition that in order to strike the electrode arm with new contacts, the striker must strike at a greater angle than fifteen degrees, which is outside the range of the most effective starting or operating.

Q Do you mean by that that those points wear in defendants' device and it soon becomes inoperative?

A Not at all. By means of the Kane improvement you have so precisely located that device that you can still operate with a range of wear of contacts within the capacities of the device.

Q Now what do you mean by the Kane improvement? The unitary bracket?

A The unitary type of construction.

Q Anything that would preserve the synchronism you speak of, that would permit the adjustment of the one to the other would accomplish the result, would it not?

A Provided you also had a device in which the velocity of the spring drive also remained constant, the things that work together. If you change the driving force of the spring or the relation of the spring to the device you change the phase of the current and thus the effectiveness of the breaking point of the electrodes. And similarly if you displace the rotor arm with respect to the electrode arm.

996 Q That would occur in any device, would it not, if you change your springs you get your changes?

A Of course you would get changes if you change any one of those elements; if you change them you do get changes. One of the advantages of the Kane device as I see it is in preparing a unitary structure in which those changes do not occur.

Q I mean the tension of the spring remains substantially the same in any magneto? They don't change the tension of the springs after they are once put on the machine?

A What magnetos are you referring to?

Q Take the Milton magneto?

A In this device no, because you have that unitary relation.

Q Take the Milton magneto, not mounted with the unitary arrangement, the tension of the spring remains the same does it not?

A Which magneto are you referring to now?

Q This Milton magneto, plaintiff's Exhibit 11, the tension of the springs in this device which operates with the rotor are always the same; they are not changed in any way?

A No. In this case you will have a magneto in which the driving springs form part of the magneto and maintain their adjustment. But in this case also you have a device in which you do not maintain the relation between the spark electrodes and the magneto.

Q The same is true of that Hennig patent that has been offered in evidence?

A So far as the driving springs are concerned.

Q What is the speed of the rotor in revolutions per minute through the action of the springs? Have you any idea?

A In which device?

Q In the Milton magneto mounted on the unitary bracket that has been offered here in evidence.

A I never measured that. I should judge it might be, 997 at least during part of its swing, at a speed which would represent 700 or 800 or 900 revolutions per minute, or very possibly less.

Q Did you ever measure the speed at which the armature works in any of these oscillators?

A Yes, sir.

Q At the time when it breaks?

A My tests would not show the exact speed at the instant of breaking, but they do show the time required to swing from the tripping position to the breaking position, and of course an average speed throughout that arc of movement at least.

Q I suppose that would vary in different machines according to the tension of the springs somewhat, and as to the—

A Yes, and the fact as to whether there was any linkage such as in this Hennig patent to which you refer, the presence

of such linkage would materially reduce the speed unless the strength of the springs was very materially increased.

Q Will you explain, just briefly now, what change in the current phase occurs when you change the speed of this rotor?

A You mean the nature of the phase change?

Q In your oscillogram what was the difference? What I am after is this: Is it just the intensity of the current rise or does the peak shift?

A There is an actual shifting of the rising portion of the curve, and of the peak with reference to the time of breaking the circuit.

Q What causes that?

A The cause that I have in mind in answering the question is the change in velocity.

Q Did you ever make an oscillogram operating a magneto by hand?

A No, sir, I never did.

Q Do you know anything about the speed you could get by hand in a nicely adjusted magneto?

A Not by any actual test; only by my judgment and 998 opinion, which is that you would not reach the speed which you get with driving springs connected with the particular magneto under consideration.

Q Would you approximate it?

A I would not attempt it, no. There is too much of a personal equation.

Q Did you not say that the spark produced by hand operation would not be within ten per cent of the spark produced with springs?

A I said it might not be within ten per cent.

Q You don't know do you really?

A Not in percentage, that was again a matter of judgment.

Q When you take the device off the engine and operate it you do not get your sparking conditions that you get in the cylinder with the gas under compression do you?

Mr. Williams: What machine are you talking about?

Mr. Mason: On any of these machines, any of these magnetos machines of a low tension type.

A So far as the time of production of the spark is concerned, and the apparent effectiveness of the spark is concerned in a low tension magneto you do get the same conditions when breaking the contacts under compression as you

do when breaking them in the open air, although there is the possibility that the spark might quench quicker under compression. But possibly you have in mind the fact that in the jump spark system there is a difference between sparking in the air and sparking under compression. But that difference I do not believe applies to make and break ignition.

Q If you were sure your parts were in synchronism when you had it off the machine, and you put it back on the machine you would be pretty sure your synchronism was right?

A What are you assuming as evidence of synchronism in that question?

999 Q What I mean is with your armature or rotor springs away from its pull piece at the proper time to produce the spark with the electrode open. In other words, you take the magneto off the engine and operate it, and you see that you have the spark, and if you put it on the engine you are sure you are going to get the spark; is that right?

A No, not as you express it.

Q Well, as to timing. That's what I'm talking about. I am talking about where it is spring driven. If the device is operated off the engine with the same spring tension and with the same relation of parts as when on the engine?

A If the device is operated off the engine with the same spring tension and with the same relation of parts as when on the engine and I get what appears to be an effective spark I would then expect to get that same spark when the unitary device is replaced upon the engine.

Q How do you tell that you have got an effective spark? Just by your eyes?

A It is difficult somewhat to tell when you have secured the most effective spark.

Q You merely know that you have got a spark?

A No you don't. It is not merely getting the spark but you can tell if you get a good spark; whether you are getting a good spark or not, but you cannot tell how good it is.

Q What do you mean by good spark?

A What we would call a fat spark. It is hard to describe the appearance of a spark which apparently is one which will secure good ignition, and it may be that that very fact illustrates one of the advantages of the Kane device; you have got your— In the Kane device you have got your synchronism,

your angular relation, and your spring driving tension established and maintained.

Q Did you not notice Mr. Carter yesterday in this illustrated device of the Weber patent, that he took the magneto off with the spark plug and he operated it without the spring and got a spark?

A Yes, a sort of a spark.

Q Well, it was a spark, was it not?

A It was not a spark that I would call an effective or very good spark.

Q As to intensity, but as to the timing of the spark, it was such that as to the movement of the rotor the field was in such a position that when the electrode was opened there was a spark produced?

A There was a spark produced.

Q And then when he put it back and operated it by the springs he got a spark, the intensity was changed?

A Considerably fatter spark, as I viewed it.

Q When it is operated by hand the arm of the rotor strikes the movable arm,—the arm of the movable electrode at just the same time as it does when it is operated by the spring, does it not?

A What do you mean by just the same time?

Q I mean the rotor is in the same position relative to the field pieces,—when it strikes the arm of the movable electrode, when it is operated by hand as by springs.

A It is in the same angular position.

Q Yes?

A But it is in an entirely different position with respect to the magnetic condition of the iron at the time the break occurs.

Q How do you know?

A By the fact that the change in velocity makes a change in phase. You have a displacement or change in phase and a good spark when operated at low velocity might not be a good spark when operated at high velocity.

Q How much change is there in phase?

1001 A In phase?

Q Yes. Isn't it something you have to measure with the very sensitive instruments in a laboratory?

A Not to get the effect of it as a practical thing.

Q How do you tell?

A One of the best illustrations is the Prony break test, which shows that; you have got to make that break to get the maximum power of your engine, you have to make that break within an angular operation of about 4 degrees of your rotor.

Q I am speaking particularly as to the condition of the spark between the hand operation and the spring operation.

A Well, I am trying to explain to you why it is not a theoretical proposition but a practical one; a very slight change in phase relation will be sufficient to throw that 4 degree point entirely outside, one side or the other, of the time at which your electrode contacts separate.

Q Isn't that the time in the comparison with the ignition in the engine cycle?—

A Not at all.

Q That you are speaking of?

A No. It is the relation between the magneto and the electrode contacts.

Q Isn't it a fair proposition, Mr. Webster, that if you take this magneto off and operate it by hand you see you have got a spark because the parts are timed so that the armature is going to break away from the pole pieces just as your electrodes open to get the spark,—that when you put it on and operate your spring that you are going to get a good spark?

A No, it is not.

Q Didn't it do it here in court?

A No, it didn't.

Q Why, he took it off and operated it and it sparked?

A Oh, there is a difference between a good spark and
1002 an effective spark.

Q How can you say that the spark was not a good spark when he put it on and operated it by the spring?

A I didn't say it wasn't a good spark; I said the spark he got when it was off wasn't an effective spark.

Q It wasn't as fat because it wasn't so intense, but the spark was there?

A The fact is, Mr. Van Deventer, that if you operate it by hand— The fact is that if you operate it by hand, just for a spark it will give you the best spark under that method of operation; then when you drive it at a greater velocity by

spring tension, you won't get the best spark because of the change in phase relation.

Friday, February 7, 1919.
2.15 o'clock P. M.

Webster }
vs
Splitdorf }

Court met pursuant to adjournment.
Present same as before.

H. G. WEBSTER resumed the stand:

Cross-Examination (Continued) by Mr. Mason.

Q Mr. Webster, I believe you have testified that this magneto in Defendant's Exhibit No. 52, could be taken off and adjusted so as to be operated by hand to produce a spark and yet, when you put it back on, it would not necessarily, when operated by a spring, it would not produce a spark.

The Court: No.

1003 The Witness: No; I have not testified to that effect at all.

The Court: A different kind of a spark.

The Witness: What I have testified to is that the spark you might get when twisting it by hand would not be an indication of the best adjustment for a spark when operated on the engine.

Mr. Mason: Q But it would indicate when operated that way that you would get a spark on the engine?

A Some sort of a spark, yes, possibly.

The Court: That is on account of the change of phase?

A Change of phase, change of angular relation, change of velocity.

Mr. Mason: Will you restore the parts of this Plaintiff's Exhibit No. 76, illustrative of the construction of the Weber patent. Will you restore them?

(A brief intermission was taken while the witness complied with Mr. Mason's request.)

The Witness: I have now restored the parts of the device as you requested.

Mr. Mason: Q Will it make a spark?

A Yes, I got a spark.

Q That spark is all right?

A I don't know.

Q Can't you tell by the looks of it?

A No, I can't tell by the looks of a spark whether you are getting the best spark. It looks like a pretty good spark.

Q It looks like a good spark, does it not?

A (Operating device.) I don't think that this is as good a spark by far as was secured with the original adjustment of it.

1004 Q How can you tell, if that spark there is not just as good, how do you know that this other spark with this other device, Defendant's Exhibit 52, is a good spark? You did it by inspection, did you not?

A By observation.

Q Yes.

A I am giving my opinion of the relative characteristics of the two sparks.

Q Yes. In putting these parts together, did you make any adjustment other than to bolt it back on?

A I endeavored to get it exactly in the same position, to get it in exactly the same position that it was when I first operated it, but I don't think that I succeeded.

Q You didn't adjust the little screw there on the arm which takes care of the movement of the electrode?

A No, I didn't touch the screw at all.

Q So that it went off and went back on in a direct synchronism anyhow, and you got a spark?

A I wouldn't want to say it is in the proper adjustment.

Q But apparently you get a good spark?

A I don't think we get as good a spark as we did before.

Q What?

A I am sure we do not.

Q Of course, you are just telling that by observation?

Mr. Williams: That is what you are asking.

A That is what you are asking. That is what you want, isn't it? I would want to put it on an engine to tell whether you are getting the best spark or not.

Mr. Mason: Q How are you going to tell it on the engine?

A By observing the operation of the engine.

1005 Q Every time you put one of these igniters on you have got to put it onto an engine and operate it to determine whether or not it is giving a good spark; is that the idea?

A Yes, sir, with the one you have, yes, sir, with this Weber device, that is what you have got to do.

Q Did you ever see a Weber device?

A I have seen this model and your model.

Q You never saw one on an engine, did you?

A No.

Q As I understand it, in this Defendant's Exhibit No. 52, you would be willing to admit that when it is operated by hand you get a spark, and when you operate it by a spring there will be a spark?

A Yes, sir.

Q But when you operate it by the spring you get a better spark than when you operate it by hand, do you not?

A Because of the increase in velocity and under normal operating conditions you will, of course, get a better spark than by operating by hand.

Q In this device which you have produced here, as illustrative of the Weber patent, the bracket is bolted to the igniter flange; is that right?

A No, the bracket is clamped between the igniter flange and the bolts which hold the igniter to the cylinders.

Q Well, it is bolted to the cylinder, I should have said, instead of to the flange, but by bolts which pass through the igniter flange; is that right?

A The bolts which pass through the igniter flange likewise—

1006 Q Then it is secured to the cylinder?

A —likewise serve to secure the shelf on which the magneto rests.

Q It is secured to the cylinder, is that right?

A When the bolts are tightened, yes.

Q What did you find in the description of the Weber patent that in any way describes or justifies the bolting of this shelf to the cylinder, in the description I am referring to?

A Do you want me to refer to the specification of it?

Q Yes, the description I am speaking about.

A Yes, I understand. (referring to document.) Now, if you will read the question, please.

(Question read.)

A The specification, page 4, line 28, refers to the bracket and igniter block as being fitted to an engine, and, later on in the same paragraph, it refers to the brackets 53 and 31 as having been secured in place. I understand this language to refer to the method of securing, illustrated in the drawings of the patent and as embodied in the model which I have just operated.

Q The description to which you refer stated that it is fitted to an engine in lieu of a similar igniter block. In other words, you take off the igniter block that was normally on the engine and put this device on, is that not it?

A Which device?

Q The Weber device?

A I don't get quite the sense of it that you seem to get.

Q The description says that it is put on there in lieu of the similar igniter block; that is, the Weber construction consists of the igniter block and the shelf which are made at the factory and sent to the place where the engine is, 1007 and then it is attached in lieu of the old igniter block, which used to be there; is that right?

A The specification reads, the igniter block 3, together with the magneto electric machine may be sent with some of the parts connected therewith and fitted to an engine in lieu of a similar igniter block, but I do not understand that that means that the igniter block and the shelf and magneto are shipped as a unit. It might be that they are shipped in the same box, but not necessarily as arranged in the model which you,—which the defendant has introduced.

Q Well, is there anything in that description which would not apply equally to the bolting of the shelf to the igniter flange, such as you find here in Defendant's Exhibit 52?

A Possibly not, if you divorce the descriptive language from the drawings of the device.

Q Now, just what is in the drawings that would show that the shelf is bolted to the engine cylinder rather than secured rigidly to the igniter block as stated in the description?

A The drawings taken together with the description mean to me a construction, as illustrated in the plaintiff's model.

Q Well, why?

A In the first place, as I think I have already pointed out, because the only bolts by means of which the shelf can be

secured in place, are the two lower bolts which are required to hold the flange of the igniter block on the cylinder wall. The drawings indicate that the holes through the flange of the igniter block are smooth holes, and there is nothing to indicate that the two parts are made in one piece; and I see no natural or obvious way of embodying that which is shown in the drawings, other than as in this model of the plaintiff's device.

1008 Q What do you mean by "smooth" holes?

A With smooth interiors.

Q Not threaded?

A That is it.

Q Yes.

A That was what I mean.

Q All right. Of course, patent office drawings just illustrate the principle and are not working drawings?

A Oh, yes.

Q That is right, is it not?

A Yes, sir.

Q These holes are not described; they just indicate the position of them; is that right?

A Simply indicate them, that is all.

Q Then, if I understand it, it is because there are three bolts and holes which are not threaded, in the drawings alone, that seem to indicate to you that the shelf is separate from the igniter and bolted through to the engine cylinder?

A I think there may be something further in the patent. I seem to recall something that impressed me as showing them separately. If you wish me to, I will look for that.

Q All right.

A (Witness referring to specifications.) What I had in mind was the language of the paragraph previously referred to, appearing on page 4, line 17, which refers to the horizontal bracket, 53, having a vertical flange, 54, as something separate from the igniter block, 3 and where the language says, rigidly, or, "securely rigidly" to the igniter block. I understand that as meaning when assembled on the engine.

Q But you don't find that in the description?

A I am reading from the description.

1009 Q I mean in the—

A I am giving you my understanding of the description.

Q I see. Doesn't that apply aequally well to the device here,

Defendant's Exhibit 52, where the shelf is bolted to the igniter flange?

A Not when you view the language in the light of the drawing to which it refers, in my opinion.

Q Then it is really the drawing which impresses you that they ought to be separately mounted?

A No, the two taken together.

Q But there is nothing in the description which is contrary to this construction which we have here in Defendant's Exhibit 52, so far as the mounting of the shelf on the flange of the igniter?

A Only as I have stated.

Q Referring again to these holes, Fig. 2, the opening would be an end view; would it not?

A It is described as an inside elevation view of the drawing.

Q I am speaking of the holes through the flanges; you would look at the ends of the holes, would you not?

A Yes, sir.

Q Where the bolts go through?

A Yes.

Q If that was threaded, how would it appear different from the way it is shown there, so far as the full lines are concerned?

A In mechanical drawings, a threaded hole is ordinarily indicated, or frequently indicated by a dotted line surrounding the—or a dotted circle, I should say, surrounding a full line circle, and sometimes there is a little shading shown.

Q That is true, but this is not a mechanical drawing?

A No.

1010 Q Or a working drawing?

A No.

Q So far as patent office drawings are concerned, that would just as well indicate a threaded hole as a non-threaded hole, is not that right?

A No, it would not; because those holes represent the holes for the bolts by means of which the flange is bolted to the engine cylinder, and they could not be threaded holes if they were to be used in that way. You have got to have smooth holes there, in order to use those bolts, bolt the igniter flange to the cylinder.

Q We are talking about what we can get from the drawing itself.

A I am telling you what you get from the drawing itself.

Q You are construing the—

A I am regarding the drawing and language as a whole.

Q You are construing the drawing, of the way you understand it is mounted?

A Yes.

Q I am asking what you find in this figure that would indicate—

A I am looking at Fig. 2 as illustrating one side of the igniter block, the flange, and look at the holes as the holes through which bolts must pass to bolt that flange to the cylinder. Now, in that view of it, those holes could not be threaded holes.

Q If the two lower unthreaded holes were threaded, would the drawing be any different for Patent Office drawing purposes?

A Decidedly so.

Q How?

A Because you would then have but one bolt to hold that flange in place. It would not answer the purpose. You
1011 have got to have three bolts there.

Q I am asking you about the drawing, the Patent Office drawing; would the showing here in this Patent Office drawing be different if the two lower holes were threaded?

A I will say it might or might not be. My opinion is that you have got to have smooth holes there in order to do what they have done, to have the structure, to which this drawing, which this drawing sets forth.

Q Will you state what ways this upstanding flange might be secured rigidly to the flange of the igniter plug from a mechanical standpoint; how could you secure that rigidly?

A As the device is described in the patent drawing, I see no way to secure it rigidly, except as illustrated in this Plaintiff's model.

Q I am asking you—

A By clamping it under the heads of the bolts which are used to secure the flange of the ignited block to the cylinder.

Q What ways are commonly used for rigidly securing two metal parts, beside bolts?

A You wish me to consider other ways?

Q Yes.

A It might be riveted to it, it might be welded to it. It might be—there might be bolts provided, separate bolts provided to fasten it to there.

Q Is there anything in this description which would be contrary to such a construction of welding this flange of the shelf to the flange of the igniter plug, in order to secure one rigidly to the other?

A Yes. They are described as separate parts.

Q But if they are made separately and welded together, could they not be rigidly secured that way?

A That would not be in accordance with the disclosure of the patent, as I see it, if so made.

Q Do you find any description there that would negative the fact that that might be the means of securing one to the other?

A Yes, when you view the description in connection with the drawings.

Q Then really, it is the drawings which lead you to—

A No, the two together.

Q I believe you said that one bolt could not be used to secure the igniter plug to the engine cylinder?

A Not with the—

Q Not with the what?

A Not with the separate igniter plug which is shown in the Weber patent.

Q It would blow off, is that what you said?

A Very apt to, or break.

Q You never had any experience in that line? You don't know, do you, more than judging that that is what would happen?

A It is largely judgment.

Q I believe the testimony that has been taken in this suit has been to the effect that this Milton magneto, Defendant's Exhibit 11, wherein the magneto is mounted on the boss, gave trouble, because the magneto shifted on the boss. Is that your understanding of the testimony?

A I think that that was, part of the testimony was to that effect. I don't remember whether that comprehended all of the difficulty.

Q By reason of this magneto shifting on the boss, the finger carried by the rotor would shift so that it would get out of timing, the spark would get out of timing relative to the compression in the cylinder; is that right?

A Not entirely so.

1013 Q What is your understanding as to that?

A My understanding is that it would shift, not only

with respect to the timing of the engine, but with respect—that is, with respect to the timing of the compression of the engine, but also with respect to the relation with the electrode arm which broke the contact in the cylinder.

Q Suppose this magneto had been mounted on a shelf so that it could not shift, a shelf had been cast on the engine cylinder, or other means had been provided, like the arm 10 of the Podlesak patent in issue, reissue patent in issue, 13878, thereby holding the magneto so that it could not shift, there would not be any trouble then, would there, about the spark getting out of time with the engine; is that right?

A Yes, it would have been difficult not only to get proper adjustment in the first place, but it would have been difficult to maintain it.

Q Why wouldn't it be maintained after you got it?

A You have a linkage there which wears. You have got an adjustment screw which may shift out of position.

Q I am speaking—

A You have to time—

Q I am speaking of the timing of the spark relative to the engine cylinder.

A Pardon me, I didn't grasp that question.

Mr. Mason: Read it, please.

(Question read.)

Mr. Mason: I mean engine cycle. Will you change that to engine cycle, please?

A What I just said had reference to the connecting rod extending between the magneto and the electrode arm. With respect to the timing in relation to the compression of the engine, if that were mounted on a rigid shelf, so that 1014 it could not shift, it would, of course, be held in correct timing with relation to the engine, just as on other magnetos, for example, that of the Hennig patent.

Q The moveable electrode in this Milton type that we are referring to, was operated by a link positively connected to the rotor and having an adjustable nut on the end of the link, which engaged the arm on the moveable electrode; is that not so?

A Yes.

Q The opening of the electrode was caused by this adjustable nut striking the arm on the moveable electrode?

A Yes.

Q Now, let us assume that we have this rigid bracket that

I have been speaking about, so that this magneto does not shift, would this not also maintain the synchronism between the rotor and the moveable electrode?

A Oh, to a certain extent, of course.

Q Why not entirely?

A Because of wear of those parts, lost motion; and there are other disadvantages of that sort of an arrangement.

Q Oh, yes.

A As compared with the unitary—

Q I am talking about maintaining synchronism.

A Pardon me until I finish my answer.

Q Yes.

A As compared with the unitary magneto ignition device of the Kane patent. What is the question?

Q In the unitary magneto proposition of the Kane patent, there is also wear there and adjustments for that purpose; are there not?

A Not to any thing like the same extent.

1015 Q But aside from the wear of the parts you would practically maintain the synchronism in this old Milton type where the magneto was separate if it had been mounted on a bracket so that it was held rigidly; is that not so?

A No; I do not think so.

Q Why not?

A Well, for example, you remove the igniter block from the engine to examine the contact points and clean them, so that as things are ordinarily built you won't get them back on in the same position. That illustrates one of the distinct differences between that method of mounting and the Kane device.

Q Did any of the witnesses testify to any such trouble in the original apparatus?

Mr. Williams: I object to that question. The record shows that.

Mr. Mason: I will change the question.

Q Do you know anything about, from actual experience, about removing these spark plugs to clean them?

A I have seen them removed and replaced, participated in the operation; and I know the way the parts are ordinarily built, particularly at the date at which that model was used.

Q You had a little generator here this morning which you were showing to the court.

A Yes; do you wish it?

Q I just want to ask what the resistance of the armature is.

A I couldn't tell you.

Q Have you any idea?

A No. Probably around 50 ohms.

Q What was the resistance of the—what would you say to resistance of an armature of the magneto of the Sumter type would be?

A Around one ohm or less.

1016 Q The magnetic drag of that little generator that you had would be many times greater, would it not?

A No, very much less.

Q What?

A Very much less. The ampere turns on an armature of that kind is very much greater with the low resistance winding than it is with the high resistance winding.

Mr. Mason: That is all.

Redirect Examination by Mr. Williams.

Q Can you produce the defendant's type B which you used in making the tests recorded by the oscillograms which you have used here?

A I can.

Q Will you do that?

A The device which I now hand you is the one referred to.

Mr. Williams: I offer that in evidence as Plaintiff's Exhibit 79.

(The device referred to was received in evidence, marked Plaintiff's Exhibit 79, and is made a part of this record.)

Mr. Williams: In answer to one of Mr. Mason's questions you said in substance, I believe, that the lag of the phase of the current, or displacement of the phase of the current generated would be different in different machines, and that it might differ even in machines substantially alike mechanically. Will you state whether or not such a current phase lag is necessarily present in any and every machine to a greater or less extent?

1017 A If I understand the question, every magneto of this type when operated at operating speed has the condition in which the current curve lags in phase behind the mechanical movement of the armature or inductor.

When I said that there might be differences in individual

machines of the same mechanical type, I had in mind minute differences which would not affect the position of the current curve as an average position. It would be practically the same in all machines of a given type and construction.

In that same connection, I decide to point out that the use of the unitary construction, that is the Kane assembly, provides a means in which the best average position, or best average adjustment for the magneto in its relation to the sparking contacts can be positively determined by laboratory tests, and thereafter made permanently a part of the manufacturing construction of the machine.

In other words, you can check these in the laboratory and determine in the laboratory which is the best relation to have, and then by means of this unitary bracket assembly, establish that as a standard relation and get it as a manufacturing process.

Q Will you look now at this Plaintiff's Exhibit No. 58 and particularly the pages toward the back of the catalog, showing various styles and kinds of gas engines, and state whether or not this unitary magneto igniter equipment of the Kane patent can be applied to any and all styles and forms of engine without change in the construction or arrangement of the engine itself or any of its parts.

A The illustrations to which you refer are found on pages 18, 19, 20 and 21 of the catalog and illustrate various different types and makes of engines. They also illustrate the various multiplicity of different locations of the operating parts 1018 of the engine, other than the magneto, and the difficulty in assembling or mounting on the engine a non-unitary device. They emphasize the facility with which a unitary device like that of defendants or of plaintiff, can be mounted on almost any type of engine with minimum interference with the existing parts of the engine, there being but the single point of attachment, which is the same point of attachment that the igniter block has.

Q Can you illustrate on any of those pictures of engines in that catalog, or in any of the pictures of engines, or engines that we have here, the sort of difficulties which you indicate would be encountered in an attempt to put an equipment like that of the Weber patent upon it?

A Perhaps as good an illustration as we can get is with reference to the model of cut-away engine found on the platform here, Plaintiff's Exhibit No. 62.

I call attention to the parts of this engine which are found

along the side of the cylinder, adjacent to the spark plug. I point out that it would be a difficult matter to mount on this engine the support 31 required in the Weber patent for the driving spring, which must actuate the magneto and to find then a place for the pusher or push rod, which is required to operate it. While it might be possible, it would be a much more difficult and expensive job than was required by mounting the unitary magneto in the place at the point where the spark plug goes through the cylinder.

With that explanation I think that the similar difficulties which might be encountered in the several engines illustrated in the catalog just handed me will be more or less obvious.

1019 In the engines illustrated in this catalog, it is obvious at once that a place would have to be provided for mounting the spring drive bracket, 31, I think the number is, of the Weber device, requiring a boss on the engine cylinder, and machine work to make that boss adaptable for the bracket, and difficulty in finding a desirable place to locate it, particularly the cut at the bottom of page 18, or in the cut at the bottom of page 21.

Also in the vertical engine illustrated on page 20 a similar difficulty would be encountered.

Q And the difficulties would be different, would they, in the case of each of these different type of engines?

A Yes. It would mean necessarily a special adaptation for each type of engine.

Q Will you look at Plaintiff's Exhibit 44, Defendant's Machine Type A, and state whether the engaging surface of the striker in that device is to be regarded as a cam or cam surface, regardless of whether the surface is curved or straight?

A Yes, the engaging surface of the yoke portion of the rotor, that is, the striker arm carried on the rotor, is to be regarded as a cam surface engaging the anvil screw in the end of the electrode arm. I say this particularly in view of the language used in the Kane patent and of the construction to which that language refers.

Mr. Williams: That is all.

Recross Examination by Mr. Mason.

Q That surface you just referred to is a straight surface, is it not?
1020

A A flat surface, yes.

Q A flat surface?

A Yes.

Q Is the rotor there in that model?

A The yoke portion of the rotor is there and the striker arm portion of the rotor.

Q But this arm is not on the rotor direct?

A It forms a part of the rotor.

Q Not rigid with the rotor?

A It is in a rigid, angular relation to the rotor which is the relation essential for the adjustment and operative relation I have been describing.

Q Do you not in the construction of the Weber patent have a flat surface against which the screw strikes?

A In the Weber patent the corresponding—that is, the striker arm has a flat surface which engages the end of an anvil screw, 27.

Mr. Mason: That is all.

Mr. Williams: That is all.

(witness excused)

1021 E. J. KANE, re-called as a witness on behalf of the plaintiff, in rebuttal, testified as follows:

Direct Examination by Mr. Williams.

The magneto generator of the unitary magneto igniter equipment of the invention of witness, as described in his previous testimony, was not something that had to be made specially for the attachment, because it was coming through the shop as an experimental machine at that time. The magneto which witness had roughly blocked in on the first drawing, a number of them, had already been made. In making the unitary block attachment there was just one casting made for the first machine. Witness heard the testimony given by Mr. Milton. Not true that Mr. Milton first came to witness and gave him a problem in the following language, or substantially the following language, namely, to take the double link machine and extend the bracket so as to form a spark plug for holding the electrodes and putting into it the electrodes and working out the mechanism. Witness did not work under the instructions of Mr. Milton in making the first drawing for his unitary magneto igniter equipment. Witness was directed by Mr. Webster to do the work, and to the best of

his knowledge, Mr. Milton did not see that drawing; that is, did not see it while witness was there, until after witness had completed it and taken it down and shown it to Mr. Webster, and he asked witness to show it to Mr. Milton. Plaintiff's Exhibit No. 17 is an original drawing, not a tracing. That drawing was made at the residence of witness, on some paper he happened to find at his house and which he used because there was no buff paper at the house. Prior to making the drawing Plaintiff's Exhibit No. 17, witness never made a drawing illustrating the unit construction. Mr. Milton did not work with him on the design as it progressed. Not 1022 a fact that the drawing Exhibit No. 18 was turned over to Mr. Kroeplin to make working drawings prior to the making of one of the actual devices in conformity with the drawing of Plaintiff's Exhibit No. 18. That drawing was never turned over to Mr. Kroeplin, nor did he have it at any time. The two drawings, Plaintiff's Exhibit No. 17 and Plaintiff's Exhibit No. 18, were retained in the possession of the witness until the time of the interference in which he was involved with the Milton application. There were no working drawings such as defendant's exhibit blue prints, or the tracings or originals for such working drawings, made by any one, to the knowledge of the witness, before the first sample machine was built in conformity with plaintiff's Exhibit No. 18 drawing. Witness did not think he ever saw the drawing which is in evidence, dated June 3, 1909, until it was produced at the trial, and had no knowledge when it was made, and did not know of any other such working drawing which was made prior to that time. Being referred to the testimony of Mr. Milton, to the effect that after the completion of the drawing, plaintiff's Exhibit No. 18, working drawings were made for patterns for the machine, witness stated that after finishing the drawing, plaintiff's Exhibit No. 18, he made a rough sketch or drawing of the igniter block with the integral bracket on it and it was from that that the pattern was made. Witness did not know what became of that sketch. It was sent down to have the pattern made off of it and he did not think it ever came back to him. There were one or two small freehand sketches made of some of the pieces used, and it was from those few drawings and Mr. Munn's scaling off of the big drawing that the first machine was made. Witness made the free-hand sketches mentioned. Asked as to how much machine work it was necessary to do

in building the first sample machine, in view of the fact that the magneto part was already constructed for other purposes, witness said:

1023 "We did not have to make any drawings of this part on which I do not see a tag to mark it (indicating)" witness having his hand on the magneto part and the rotor and the shaft.

"We made a rough sketch to get a forging made to take the place of this piece, which is marked Plaintiff's Exhibit 14-A. The electrodes and this part on the plug is similar in dimensions to the standard International Harvester Company igniter plug, like Plaintiff's Exhibit 11-A, except that we had to put a small arm on it made out of a forging, but the main parts of it were taken from the I. H. C. igniter. That left as a dimension a finished part that we had to make in the shop to drill the hole for the shaft of the rotor and finish off the boss to mount the magneto on and drilling a hole in the casting over here (indicating) to carry the eccentric."

Mr. Munn was a very highly skilled mechanic and in the opinion of the witness, one could take that main drawing Plaintiff's Exhibit No. 18, and turn it over to Mr. Munn, with a casting to start with, and he could go ahead and complete the whole machine without any trouble. In Plaintiff's Exhibit No. 11 apparatus the engine push rod in operating the push finger of that mechanism was located above the axis of the rotor, and it was because there was a lever in there between the engine cam and the magneto that made it necessary to switch the cam around on the engine. In the 2-link mechanism illustrated in Defendant's Exhibit 18 the push-rod or engaging member as driven by the engine, was located below the axis of the rotor shaft. The reversing lever was not employed with this 2-link mechanism. When the reversing lever was employed in connection with the apparatus of Plaintiff's Exhibit No. 11 it was not necessary to change the location of cam on the engine crank shaft. The cam was not changed, but the eccentric that drove the magneto or igniter, or igniter push-rod was changed in relation to the exhaust cam, being turned practically 180°. With the double link mechanism it was not necessary to shift the eccentric. In the apparatus of Plaintiff's Exhibit No. 18 the engine push rod is located above the axis of the rotor, and in that

1024 respect the location of the push rod finger of Plaintiff's Exhibit No. 18 apparatus is like the old Milton appara-

tus of Plaintiff's Exhibit No. 11. Nevertheless, it was not necessary in the apparatus of Plaintiff's Exhibit No. 18 to change the position of the engine eccentric to 180° , because in the attachment illustrated by the Plaintiff's Exhibit No. 18 there was no lever introduced between the magneto trip and the eccentric. There was a direct push, instead of a lever being in there.

After Mr. Milton first criticized the design of the apparatus as shown in Plaintiff's Exhibit No. 18, and said that he did not think it was going to work, and that witness had got the igniter finger pointing upwards on the direct push of the magneto, and that that was going to place it out of time, so that it wouldn't trip at the right time, there was very much discussion. Witness simply stated that he was sure it would work, and Mr. Milton inspected it further and finally agreed that it probably would. Witness did not make the drawing Exhibit No. 18 under Mr. Milton's instructions or direction.

A. C. KLECKNER, re-called as a witness on behalf of plaintiff, in rebuttal, testified as follows:

Direct Examination by Mr. Williams.

Witness heard the testimony given by Mr. Cox on the preceding day. Witness had ascertained the number of unitary magneto igniter equipments sold by the Webster Electric Company to the International Harvester Company, beginning in 1914, and found that during the year 1914 there were shipped to the International Harvester Company at Milwaukee 9,904 equipments; during the year 1915 there were 1025 shipped 5,373 equipments; during the year 1916, 5290 equipments; during the year 1917, 5,471 equipments; and during the year 1918, 2,503 equipments; during the month of December, 1918, there were shipped 576 equipments to the International Harvester Company. Witness heard Mr. Cox's testimony relative to the number of magneto equipments of a different type which had been installed on engines during recent years, but neither those figures nor anything else which the witness had heard or learned since giving his previous testimony had changed his opinion that of all the single cylinder stationary internal combustion engines now manufactured and sold in this country, approximately 80%

are equipped with the unitary magneto igniter equipment such as is involved in this suit. The figures given by the witness as to the number of equipments shipped by the Webster Electric Company to the main works at Milwaukee of the International Harvester Company did not include the number of equipments shipped to branches of the International Harvester Company, and other points throughout the country, for repairs or replacements or other purposes.

Plaintiff's counsel offered in evidence as Plaintiff's Exhibit No. 80 a printed copy of the Rules and Practice of the United States Patent Office as revised January 1, 1916.

At this point in the proceedings plaintiff's counsel, Mr. Williams, made a personal statement to the Court, which is included in this statement of evidence at his request but is not considered by defendant's counsel to be any proper part thereof.

STATEMENT.

Mr Williams: Now I do want to say this, your Honor, relative to the matter of these notes that Mr. Peaks had been asking about repeatedly and the date upon which those notes were paid. I do not know whether he has in any of his statements explained his anxiety relative to them and the 1026 proof of the date of payment or whether your Honor has looked over the copy of the interference proceeding, between Kane and—which one was that?

Mr Bulkley: Milton.

Mr Williams: Between Kane and Milton. During the course of that interference, as the interference record as it has been offered here will show, there was first an award of priority in favor of Kane. Shortly after that award of priority there came, there was sent to me or to my firm a notice and action taken by the Commissioner of Patents and by which he vacated the decision or judgment of the examiner of interferences in making that award of priority upon the ground, as stated by him that it having been brought to his attention, "The fact is developed that when the testimony was taken both the Kane application and the Milton patent were owned by the Webster Electric Company and that com-

pany therefore had it within its power to control the evidence introduced," those being the reasons given for taking that action.

The fact of the matter is, shortly after the receipt of that notice or letter from the Commissioner of Patents I went to Washington and explained—

Mr Bulkley: Are you stating facts?

Mr Williams: Yes.

Mr Bulkley: As a witness or what?

Mr Williams: I am willing you should interrogate me. I want to be sworn, if necessary. Yes, I should like to state the fact.

I saw the Commissioner of Patents and told him all of the circumstances as I knew and understood them at that time, whereupon he requested me to file a petition asking for such relief as I had told him I wanted, which petition was then filed and is here a part of this record and supported, as he suggested, by my affidavit, which is in the record here now.

Without taking the time to read that affidavit, it states, I think, in substance, that while I was the attorney of record, as the record then showed, for Milton, and my firm 1027 were the attorneys of record for Kane, that I held the title and still even at that time held the title in the Milton patent as trustee under a certain trust agreement under which some notes were to be paid and some of which notes were yet to be paid in future, some not maturing until 1919.

I want to say this: that when I made that affidavit the title to the patent was still in me as trustee. No assignment had then been made by me to the Webster Electric Company. The facts stated in that affidavit as to the dates when the notes matured were in conformity with the record I had of the matter in my copy of the trust agreement and the escrow agreement which preceded it and which showed to me at the time I made the affidavit that the notes did not mature until 1919, and that in making the affidavit I referred to the trust agreement and the escrow agreement to which I was a party and based the statement contained in my affidavit upon what my records then showed as to the dates; and at that time I had never been notified by anyone, so far as I can remember and so far as I have been able to learn by an examination of all of the records in my office, I never had been notified that the last of those notes had been anticipated in its payment. That is to say, the investigation that we made here during

the trial—made sometime earlier, as a matter of fact, it was about the time of the incorporation of the Webster Company of Wisconsin—showed that the notes had then been paid, but no notice had been given me of that fact either by Milton or by the Webster Electric Company at the time when I made this affidavit saying that Milton still had an interest, a reversionary sort of interest in his patent.

1028 Now, in about March, 1918, when the incorporation of the Webster Electric Company of Wisconsin was imminent, or in progress, there came a time and a request to my office to do the things necessary to effect the formal lodgment of title in the new corporation, so that the title papers might be recorded. At that time we prepared assignments of everything that we knew of to which the Webster Company of Virginia had title; sent them to be executed by the old corporation; whereupon then for the first time I received a letter which I have here and will be glad to show to counsel, telling me that from those transfer papers we had omitted these Milton patents, of which this particular one involved in the interference is one. I have all of the letters here, which I will show, but without attempting to detail what passed back and forth, the substance of it was that I then made—well, I think I first wrote the company that we had not made the assignment of that patent because proof had not been made to me yet of the payment of those notes, and evidently had not been made, and then it was the notes were sent to me, canceled notes, and I was satisfied they had all been paid, some of them, in anticipation of the dates upon which they mature. Whereupon I then, as trustee, executed an assignment of the patents. I think the papers offered by the defendants will show that the assignments were executed, I think, to the Wisconsin corporation direct rather than first to the Virginia corporation and then to the Wisconsin corporation.

Now, the reason I make that statement is this, that the affidavit which I made states, I think, it states in substance at least, that Milton had an interest in the patent and would continue to have that interest until all of the notes had been paid and that some of the notes did not mature until 1919.

I am willing to answer any questions that counsel may want to ask me or any that the court may be interested in upon that matter.

The Court: That is sufficient, a personal statement.
1029 Plaintiff's counsel offered in evidence as Plaintiff's Exhibit No. 80, the trust agreement of December 11, 1915, between Milton and the Webster Company and Mr. Williams as Trustee.

Plaintiff's counsel also offered in evidence certain marked parts of the Manning and Van Deventer depositions taken in the mandamus suit between Emil Podlesak and the Webster Company as Plaintiff's Exhibits No. 81 and No. 82, which were received subject to defendant's objections.

Plaintiff's counsel also offered in evidence as Plaintiff's Exhibit No. 83 the agreement between all of the defendants as to the party to whom, for their benefit, as their interests may appear, the royalties were to be paid.

Here occurred a discussion between court and counsel with reference to the answer of the Sumter Company to plaintiff's supplemental bill, which discussion resulted in leave of court to the Sumter Company to adopt, as its answer, the answer to said bill filed by the Splitdorf Company; and with leave to the plaintiff to amend its supplemental bill in such a way as to allege the present Webster Company of Wisconsin as a successor to the Webster Company of West Virginia.

At the request of defendant's counsel, it was stipulated that a copy of the British patent to John Lewis Milton, dated October 28, 1909, No. 24,838, was received in the Patent Office of the United States on July 18, 1910.

It was further stipulated, at the request of plaintiff's counsel, that on or before December 3, 1915, H. R. Van Deventer of Sumter, S. C., and Edward E. Clement of Washington, D. C., had been appointed as attorneys for the party Podlesak in interference No. 35,181, between Podlesak and Kane.

Defendant's counsel offered in evidence a part of the files of this Court in an action at law brought by the Webster

Electric Company, a corporation under the laws of
1030 West Virginia, against Tesla Emil Podlesak, No. 32,313, the action having been originally commenced in the Municipal Court of Chicago, as its No. 209,569 and removed to this Court in regular manner for diversity of citizenship, the part of the file so offered being the transcript filed in this Court upon removal, together with the original statement of claim, and a stipulation for its dismissal of January 25, 1919, filed in this Court, and order dismissing the same, on the same date, entered by Judge Carpenter, the documents offered to

be marked Defendant's Exhibit No. 73. Objected to by plaintiff's counsel, and received subject to objection. The statement of claim filed in the Municipal Court in the above case, on December 28, 1915, was separately marked Defendant's Exhibit No. 74; and the stipulation dismissing the suit was marked Defendant's Exhibit No. 75, and Judge Carpenter's order, dismissing it, Defendant's Exhibit No. 76.

Which was all of the evidence offered on the hearing of the above entitled cause.

1031 It is stipulated and agreed that the foregoing Statement of Evidence may be approved by the Court.

WILLIAMS, BRADBURY & SEE,
Solicitors for Plaintiff.

EDWARD RECTOR

DAVID B. GANN

Solicitors for Defendant Splitdorf Electric Company

Approved Accordingly.

CARPENTER

U. S. District Judge.

29th Oct. 1919

* * * * *

1032

OPINION.

* * * * *

Williams, Bradbury & See and Jerome N. Frank, of Chicago, Illinois, and Livingston Gifford of New York City, for plaintiffs.

Charles C. Bulkley and Gann & Peaks of Chicago, and Sturtevant & Mason, of Washington, D. C., for defendants Sumter Electrical Co. and Splitdorf Electric Co.

Henry Joseph Podlesak pro se, of Chicago, William D. Thompson, of Racine, Wisconsin, and William L. Hall, of Chicago, for Tesla Emil Podlesak.

Original and supplemental bills for patent in infringement and unfair competition, suit was commenced Oct. 12, 1915, and the supplemental one Oct. 25, 1918. The patents are as follows:

No. 13,878 (reissue) to Emil Podlesak, Feb. 9, 1915.

No. 1,055,076 (original) To Emil Podlesak, Mar. 4, 1913.

No. 947,647 to Henry J. and Emil Podlesak, Jan. 25, 1910.

No. 948,483 to the same persons Feb. 8, 1910.

No. 1,003,649 to the same persons Sep. 19, 1911.

No. 1,022,642 to Henry J. Podlesak Apr. 9, 1912.

No. 1,056,360 to Henry J. and Tesla E. Podlesak, Mar. 18, 1913.

No. 1,098,052 to Emil Podlesak, May 26, 1914.

No. 1,098,754 to Emil Podlesak June 2, 1914.

No. 1,101,956 to Emil Podlesak, June 30, 1914.

The supplemental bill is for infringement of the patent to Edmund J. Kane, No. 1,280,105, Sept. 24, 1918, application Feb. 2, 1910.

These patents all relate to current generators for ignition applied to internal combustion hit and miss engines, and improvements.

The validity of the Podlesak patents was not a matter of controversy on the trial, by reason of the fact that the 1033 plaintiff, and the corporate defendants are licensees or assigns of the Podlesak patents, and hence are estopped to question their validity. Thus the controversy involved the construction of the two license contracts Exhibits C and D explained later, as well as the validity of the Kane patent brought in by supplemental bill. The contracts referred to with two others are in substance as follows:

By Exhibit A. license agreement of Nov. 2, 1906, the Podlesaks give to plaintiffs predecessor the exclusive license to make, use and sell within the United States, for the term of any patents which might be granted, applications No. 76559, 413068, 413069 and 413,070, and covenanting that while the license was in force, that they would not grant, permit or encourage others, to make, use or sell the inventions. It was agreed that the agreement should extend to and be binding upon the heirs, assigns and legal representatives of the Podlesaks, and the successors and assigns of the corporation. It is claimed by defendants that this agreement was revoked some time before February 5, 1914, when Exhibits C and D were made.

Exhibit B Aug. 17, 1912, is a contract between the Podlesaks dividing their interests among themselves in the patents in question, and serial No. 618,483.

By license agreement Exhibit C, Feb. 5, 1914, the Podlesaks granted to plaintiff the exclusive right to make, use and sell the inventions described as Nos. 947,647, 948,483 and 1,003,649, within the United States for the patent terms; cove-

nanting that they would not while the license was in force make, use or sell the invention or permit, grant or encourage others to do so. The same provision as to assignment was also contained in this license.

By the shopright agreement, Exhibit D, Feb. 5, 1914, the Podlesaks made a contract with plaintiff reciting that they were owners of patents Nos. 1,022,642, 1,056,076 and 1,056,360, and applications No. 734,143, 668,153, 639,738, and that plaintiff desired to secure a shopright and license to make, use and sell the inventions in the United States for the life of the patents; and that it was therefore agreed that the Podlesaks granted to plaintiff a shop right and license to make, use 1034 and sell the inventions described in the patents and applications in the United States for the terms of the patents.

The corporation further agreed that it would use the devices made under this shop license only in connection with or for repairs to, the devices mentioned in Exhibit C, and if made or sold not as a part of such devices the corporation would pay royalty 5% of gross receipts, and Podlesaks agreed "that they will not, while this license to the party of the second part is in force, give or grant shop licenses to make, use or sell the hereinsaid inventions, expressly reserving, however, the right to themselves to make, use and sell the hereinsaid inventions". This agreement to be terminated upon the termination of Exhibit C.

The same clause as to assigns is contained in this paper as in Exhibit A. By clause 8 of Exhibit D it is provided that the plaintiff with the written approval of the Podlesaks, may grant shop licenses, to makers of or dealers in gas-engines or gas-engine accessories embodying the inventions of patents 1,022,642 and 1,055,076 (the latter being for a bracket to mount the magneto upon the engine), on the same terms as to use only in connection with the inventions licensed in Exhibit C.

By the 9th paragraph it was provided that the plaintiff "shall not permit or encourage other parties to manufacture, use or sell devices covered by hereinbefore mentioned patents or patents that may be granted on hereinsaid applications" except as above provided as to licenses to engine builders or dealers.

In the 2d paragraph it is agreed that both parties should assist each other in procuring patents, and in any suit or pro-

ceeding brought under any of the patents or for their infringement; but the Podlesaks should not be required to bear any expense in any such suit and they appointed the attorney for the plaintiff as their agent or attorney for the purpose of joining them as complainants in any such suit for infringement, without expense to the Podlesaks, who were to be exempt from liability for damages and costs in such suits, which were to be assumed by the plaintiff.

A further agreement made Jan. 20, 1915, Exhibit E, changes the royalty and contains the same agreement as to assigns.

1035 The Podlesaks having on September 4, 1915, assigned all these patents to the Sumter and Splitdorf Companies and the contracts Exhibits C and D, the construction of the license agreements becomes very important.

It should further appear that Emil Podlesak entered the employment of plaintiff's predecessor August 10, 1909, for the purpose of experimenting in magnetos, and if patents should be obtained on his inventions relating to the magneto then in use they were to be assigned to plaintiff's predecessor. In May 18, 1910, a second contract was made, providing that Podlesaks should give his entire time to the development of magnetos for the use of which a royalty was to be paid. And by a third agreement, made March 3, 1913, reciting that Podlesak was employed by plaintiff, and that it desired to secure for its benefit and use such improvements in ignition apparatus as he might from time to time develop and that any patents obtained by him thereon should be assigned to plaintiff. This contract was to run until March 3, 1916. Podlesak ceased to be employed under this contract May 14, 1915. Under these contracts Emil Podlesak was successively an employe, superintendent, works manager and secretary of plaintiff corporation. These employment contracts, so far as they relate to the ownership of patents, were superseded by Exhibits C and D above stated.

The meaning or construction of Exhibit C is entirely clear. The Podlesaks reserved no interest of any kind in any of the patents licensed and had nothing to assign to the Splitdorf Company except the right to the royalties secured by the contract and the legal title to the patents. That is all the assigns took by the assignment. There is no controversy on this point. The second contract Exhibit D, however, is not so plain.

A patent conveys to the patentee only a negative right of exclusion not the natural original right to make, use and sell the device covered by it. A licensee by the license obtains only immunity from an injunction suit brought against him by the patentee or owner. *Paper Bag Case*, 210 U. S. 405, 28 S. Ct. 748, 52 L. Ed. 1122. *Hartman v John D. Park & Sons*, 145 Fed. 358, C. & A. Ry. Co. v Pressed Steel Car Co. 243 Fed. 883, C C A Seventh Circuit. So by the first clause of

1036 the contract the plaintiff obtained immunity from suits by the Podlesaks against it, but left them free to grant licenses to others, except as far as the plaintiff was authorized to grant licenses to engine builders and dealers in engines or accessories, such as the Splitdorf Company. The right of exclusion of others which is the right, dominion or monopoly secured by the patents was thus parceled out, divided or partitioned as follows:

The Webster Company had the right to exclude every one but their engine builder or accessories dealer licensees, and the Podlesaks. By the second paragraph the plaintiff might sue for infringement and control of the litigation, and by paragraph 8 grant licensees to a limited class reserving royalties to itself. Excluding for the moment the later provisions of paragraph 1, quoted above, the patentees might grant licenses, except to the limited class referred to. But by paragraph 1 they covenanted that they would not exercise this right; "that they would not give or grant shop licenses to make, use or sell the hereinsaid inventions, expressly reserving, however, the right to themselves to make, use and sell the hereinsaid inventions." Then by the final clause the contract was made to extend to and be binding up assigns, etc.

The vital question therefore is did the patentees have the right to assign the reserved right or power to make, use and sell in view of all the recited provisions?

It will be noticed that they retained no power of exclusion whatever; that was in the plaintiff. Their patent rights were gone, but the Webster Company yielded to them the right to go into business. They did not avail themselves of this, but if they had done so, and a competitor had infringed it seems clear that they could not have maintained an infringement suit, since that right was in the Webster Company alone. But not to place too much weight on a technical point, is the provision for assignment at all consistent with their agreement not to make shop licenses or with the clause giving the right

to the plaintiff to license to makers of and dealers in engine accessories? The patentees have assigned the patents to the defendant companies, members to which plaintiff was authorized to grant licenses, and those companies are now exercising shop rights under the assignment apparently in the face 1037 of the agreement that the patentees would not authorize this, and that the plaintiff might do so.

The only way to harmonize all the contract provisions is to regard the right of the patentees to assign as limited to the bare legal patent title and the right to royalties, accounting and inspection and that the words "to themselves" should read "to themselves only." Thus all the provisions are made consistent inter se and an inequitable result prevented. The patentees have received \$95,416 in royalties under Exhibit C, covering six years, or \$16,000 a year. They could well afford to stay out of the risks of business. To attempt to authorize a formidable competitor like the Splitdorf Company, one of the very dealers to whom plaintiff was given the right of license, after the latter had built up an enormous business, to profit by that business, is utterly foreign to the spirit and purpose of the contract. The assignment should be restricted to the legal title and right to royalties, accounts and inspection, and the power of the plaintiff to sue for infringement without joining the assignee be recognized. Whether the right of inspection of plaintiff's books should be regulated so as to prevent a competitor from learning the customers and business secrets of the plaintiff should be postponed until the decree is settled.

The case of *Waldo v American Soda Fountain Co.*, 92 Fed. 623, is distinguishable because the general clause making the contract extend to assigns could not possibly reach any assignable interest except that to which the court applied it.

The Kane and Milton Patents. Both these patents were produced in plaintiff's shop by its employes and with its facilities. It owns the patents and by its outlay and business management has made them of great value. It could have sued on both of them in the alternative, and thus escaped the burden of establishing the priority of either. Having sued on Kane it must technically show its priority; but it has always owned both and has given them almost all of their value.

It is indeed true that Kane must be shown to have been the prior inventor, by proof beyond reasonable doubt. 1038 This is required by the law and the evidence must be clear and convincing. Milton's British application was

filed first and Kane's at a later date, but within a year. Hence the rule as to reasonable doubt applies in full force.

The evidence shows the following: Both Milton and Kane were plaintiff's employes. Milton was Kane's superior, being employed as an engineer and inventor, whose inventions were to belong to plaintiff. During the year 1909, up to August 20, he was working on a high tension magneto for variable speed, multi-cylinder gas engines, which gave great promise, and was the means of securing a large contract for plaintiff with the Cadillac Company, but which was a failure. He was also paying some attention to the low tension magneto for hit and miss engines.

In April, 1909, the magneto produced by plaintiff called the Milton Magneto, proved unsatisfactory, and there was danger of plaintiff losing the business of supplying it to its chief user, the International Harvester Company. Mr. Webster, the president of the plaintiff, urged Kane, and another employee by the name of Chiville, to try to produce a device which would solve the difficulty. Kane worked the matter out on April 11, 1909, made an incomplete drawing and brought it to plaintiff's office. He followed this by a complete drawing made April 14, 1909, showing the new device in full detail. He exhibited the first drawings to his father, then employed by the Harvester Company, and to persons in the office, and the later drawing to Mr. Chiville and others, and a device made according to the later drawing was produced shortly after, put on an engine and worked satisfactorily. None of these facts is in dispute, but Milton testifies that the idea was his and not Kane's, and that the latter made the last drawing under his direction. Kane produced both of the drawings, they bear his name and the dates, and he is corroborated by his father, who produced his diary showing the date appearing on the first drawing, both of which are in evidence.

1039 Milton's testimony that the drawings were made under his direction is not corroborated, except by slight circumstances unsatisfactory in their character, and is inconsistent with his testimony and conduct in the Kane-Milton interference proceedings in the patent office. In those proceedings he put the date of his disclosure in August, 1908. On this trial he adopted Kane's date. He took very little interest in the interference proceedings, but refused to concede priority to Kane. His American patent was owned by plaintiff so he had no interest in showing priority, except the

pride of an inventor. He produced no drawings showing his alleged discovery other than those in the English patent made in October, 1909; no original drawings whatsoever, no corroboration of his claim to invention. While the correspondence in 1909 between him and Mr. Webster shows that he took considerable interest in the improved low tension magneto, as well as the high tension device, and he attempted to develop it in England, yet the evidence as a whole is overwhelming that he was not the inventor, and that Kane was. The evidence is thoroughly satisfactory. A like decision was reached in the patent office also, and this determination imposed upon Milton the burden of showing its incorrectness under Section 4914, R. S. U. S., decisions by the Court of Appeals of the District of Columbia in interference cases are binding on the office, they are not *res adjudicatae* in the courts. *Westinghouse v. Hein*, 159 Fed. 936, 87 C. C. A. 142, 24 L. R. A. N. U. S. 948. Like all executive decisions they are presumptively valid on questions of fact, not subject to collateral impeachment except for gross mistake or fraud. A patent is presumed valid, as everybody knows. Like presumption should aid the decision of the examiner in deciding an interference.

Apart from these considerations, however, the proof shows that Kane is beyond reasonable doubt the first inventor.

The Kane Patent. It is urged by defendant that the claims of the Kane patent sued on, being 2, 3, 7 and 8, are invalid because not with the original disclosure, 2 and 3 being in 1040 the Milton interference, and the other first introduced in 1918. Thus it is necessary to examine Kane's original application, on which he obtained his first patent, No. 1,204,573, the one in suit having been issued on a divisional application.

Kane's first application of Feb. 2, 1910, describes the magneto, and the mechanism by which the armature is so operated as to cause a spark to be produced in the engine cylinder at the instant of compression. The drawings show the device fully, with one exception and are reproduced in the patent in suit, with an additional one taken over from the Milton patent, showing how the movable electrode is brought back to normal position. It is true that the main object of Kane seems to have been to cover means for rendering the apparatus inoperative during the high speed period of the engine. But if he shows enough in his specification, drawings and claims to

cover the elements of the claims made later, in the patent in suit, that is sufficient.

In the first place the drawings in the first application exhibit all that the later claim two includes, except the curved cam surface. They show a cam surface in the sense that two surface are brought in contact by circular movements around different centers and with different radii. They they slide on each other there will be the true cam movement. Claim 3 of the patent in suit counts on a cam surface only, and hence that claim is certainly within the original drawings. Kane therefore had the right to make that claim.

Claims 7 and 8 are much broader, and it is urged that the original disclosure did not cover the subject matter of these two claims. The claims follow:

"7. In an electrical ignition device for internal combustion engines, the combination of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, 1041 mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, a rigid unitary and integral support upon which all of the aforesaid parts are mounted, whereby all of said parts may be removed from and returned to their position upon an engine cylinder without disturbing their relations one to another, conductors for carrying electric current from said generating winding to said electrodes, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it.

8. In an electrical ignition device for internal combustion engines, the combination of a magneto generator, comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, a supporting member upon the several parts of which all of the aforesaid mechanism is mounted and having a single integral part adapted to be attached to the engine, whereby all of said mechanism may be removed from the en-

gine by removing said single integral part and may be returned to its position upon the engine with unchanged relations between any and all of the parts of all of said mechanism, thereby insuring the predetermined synchronism and interrelated adjustment of said mechanism when it is replaced upon the engine, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it."

Original claim 8 in the first Kane application reads: "5.

In igniters for explosive engines, the combination with 1042 an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating member controlled by the running of the engine for moving the oscillatory armature in one direction, means for moving the oscillatory armature in the opposite direction, means for separating the electrodes when the oscillatory armature is moved in said opposite direction, and means for timing the movement of said armature in said opposite direction."

I think that claims 7 and 8 are shown in all their elements in the original application. Figure 1 shows the unitary structure attached to the engine, and claim 8 (original) shows in a general way the electrical device. I find claims 3, 7 and 8 of the Kane patent in suit valid.

Eight years elapsed between applying for and issuing the Kane patent, but Kane complied with the law and Patent Office Rules in all respects. Two interferences had to be disposed of, with the necessary delays incident to them. A divisional application was required and must be prosecuted. Mere delay does not affect the validity of the patent. *Columbia Motor Car Co. v. Duerr & Co.*, 184 Fed. 893, 107 C. C. A. 215; *Cleveland Foundry Co. v. Detroit Vapor Stove Co.*, 131 Fed. 853, 68 C. C. A. 283, *Cadillac Motor Car Co. v. _____*, 225 Fed. 983, 141 C. C. A. 105. There are many other like decisions.

The question of collusion in the Milton-Kane interference is entirely set at rest in favor of plaintiff the decision in this circuit of *Western Glass Co. v. Schmertz Wire Glass Co.*, 185 Fed. 788, 109 C. C. A. 1.

It is unnecessary to consider the effect of dissolving the Kane-Podlesak interference by reason of the conclusion that

the assignment of Exhibit D is limited to the patent legal title, royalties, accounting and inspection.

1043 Claims 1, 2, 3, 8, 9, 21 and 22 of the Podlesak reissue 13878 are infringed also such claims of Podlesak patent 1,101,956 as may be in issue.

No sufficient proof of contributory infringement appears, and the bill should be dismissed as to the Podlesaks. Other matters reserved until settlement of decree.

SANBORN,
J.

(Endorsed) Filed February 13, 1919. T. C. MacMillan,
Clerk.

1044

DECREE.

April 4, 1919.

This cause having come on to be heard on the pleadings and proofs, and having been argued by counsel, and the court being fully advised in the premises, it is

Ordered, Adjudged And Decreed, as follows:

I.

That United States Letters Patent No. 1,280,105, granted September 24, 1918, to plaintiff, Webster Electric Company, of Racine, Wisconsin, a corporation of Wisconsin, on the application of Edmund Joseph Kane, for improvements in Electric Igniters, are good and valid in law, and that plaintiff, Webster Electric Company, a corporation of Wisconsin, is the sole and exclusive owner of said Letters Patent and of all rights and privileges thereunder.

II.

That plaintiff, Webster Electric Company, a corporation of Wisconsin, is the licensee and the owner of other rights and privileges granted by and under the contracts C, D and E, identified in the original bill of complaint under each of United States Letters Patent No. 947,647, granted January 25, 1910 to Henry Joseph Podlesak and Tesla Emil Podlesak, for improvements in Inductor Generators for Ignition Purposes; No. 948,483, granted February

8, 1910, to Henry Joseph Podlesak and Tesla Emil Podlesak, for Inductor Generators for Ignition Purposes; No. 1,003,649, granted September 19, 1911 to Henry Joseph Podlesak and Tesla Emil Podlesak, for improvements in Inductor Generators for Ignition Purposes; No. 1,022,642, granted April 9, 1912, to Henry J. Podlesak, for improvements in Low Tension Sparking Mechanism for Gas Engines; No. 1,056,360, granted March 18, 1913, to Tesla Podlesak and Henry Joseph Podlesak, for improvements in Inductor Generators for Ignition purposes; No. 1,098,052, granted May 26, 1914, to Emil Podlesak, for improvements in Magneto Machines; No. 1,098,754, granted June 2, 1914, to Emil Podlesak, for improvements in Inductor Alternators; No. 1,101,956, granted June 30, 1914, to Emil Podlesak, for improvements in Ignition Devices for Explosive Engines; and No. 13,878, reissued February 9, 1915, to Emil Podlesak, for improvements in Current Generators and Igniters for Internal Combustion Engines.

III.

That United States Letters Patent No. 13,878, reissued February 9, 1915 to Emil Podlesak, for improvements in Current Generators and Igniters for Internal Combustion Engines, and United States Letters Patent No. 1,101,956, granted June 30, 1914, to Emil Podlesak, for improvements in Ignition Devices for Explosive Engines, are good and valid in law.

1046

IV.

That the defendants Sumter Electric Company and Splitdorf Electrical Company have infringed claims 3, 7 and 8 of said Letters Patent No. 1,280,105 and claims 1, 2, 3, 7, 8, 9, 15, 21 and 22 of said Letters Patent No. 13,878, and claims 1, 2, 3, 6, 11 and 12 of said Letters Patent No. 1,101,956, by the manufacture and sale of machines exemplified by Plaintiff's exhibit No. 44, Defendants' Machine Type A, and that said defendant corporations also have infringed claims 3, 7 and 8 of said Letters Patent No. 1,280,105, and claims 15, 21 and 22 of said Letters Patent No. 13,878, and claims 1, 2, 3, 6, 7 and 12 of said Letters Patent No. 1,101,956 by the manufacture and sale of machines exemplified by plaintiff's Exhibit No. 79, Defendants' Machine Type B, and that said defendant Splitdorf Electrical Company has infringed claims 7 and 8 of said Letters Patent No. 1,280,105 and claims 15, 21, and 22 of said Letters Patent No. 13,878, by the manufacture and sale of

machines exemplified by Plaintiff's Exhibit No. 45, Defendants' Machine Type C, and that said defendant corporations have violated the rights of plaintiff under said Letters Patent by the manufacture and sale of said machines.

V.

That a perpetual writ of injunction be issued forthwith against the defendants Sumter Electric Company and Splitdorf Electrical Company, enjoining and restraining them, and each of them, and their officers, agents, attorneys, clerks, servants, workmen, representatives, and all others under the control or the direction of either of them:

1047 1. From directly or indirectly manufacturing, using, selling, disposing of, offering for sale, offering to dispose of, or advertising the infringing machines exemplified by Plaintiff's Exhibit No. 44, Defendants' Machine Type A, Plaintiff's Exhibit No. 79, Defendants' Machine Type B, and Plaintiff's Exhibit No. 45, Defendants' Machine Type C, or any other machine embodying the invention claimed in claims 3, 7, and 8 of said Letters Patent No. 1,280,105, claims 1, 2, 3, 7, 8, 9, 15, 21 and 22 of said Letters Patent No. 13,878, or claims 1, 2, 3, 6, 11 and 12 of said Letters Patent No. 1,101,956, or in any of said claims, and from in any manner infringing any of said claims or violating plaintiff's rights thereunder, and from in any manner aiding, assisting or co-operating with others so to do.

2. From directly or indirectly using the name "Podlesak" on or in connection with the sale of, or in advertisement of, any apparatus of the class described in said Letters Patent Nos. 947,647, 948,483, 1,003,649, 1,022,642, 1,098,502, 1,098,754, 1,101,956, and reissue 13,878. But the rights of Henry J. Podlesak and Tesla E. Podlesak under Exhibit D are not herein determined.

VI.

That a perpetual writ of injunction be issued forthwith against the defendants Sumter Electrical Company, and Splitdorf Electrical Company, enjoining and restraining them and each of them, and their officers, agents, attorneys, clerks, servants, workmen, representatives, and all others in privity with
1048 them, or under the control or the direction of either of them, from doing or procuring to be done, anything in

derogation of the right of plaintiff, Webster Electric Company, a corporation of Wisconsin, to institute, maintain and control suits, either in the name of Webster Electrical Company, Splitdorf Electrical Company, Sumter Electrical Company, and others, or any of them, as plaintiff may determine, for the infringement of said United States Letters Patent Nos. 947,647, 948,483, 1,003,649, 1,022,642, 1,056,360, 1,098,052, 1,098,754, 1,101,956, or reissue 13,878, or any of them, and from directly or indirectly interfering with, obstructing, or in any way opposing or aiding others to oppose, the institution, maintenance, and control of any such suit by plaintiff.

VII.

That plaintiff recover of the defendants Sumter Electrical Company and Splitdorf Electrical Company the damages which plaintiff has suffered and the profits which said defendant corporations have made by reason of said defendant corporations' aforesaid infringement of plaintiff's rights under said Letters Patent, and that this cause be referred to Charles B. Morrison, Esq., a Master of this court, to take and state an account of the damages and profits so recoverable by plaintiff from said defendant corporations, and report the same to this court; and that said defendant corporations and their officers, agents, attorneys, clerks, servants, workmen, representatives, and all others in privity with them or under the control or the direction of either of them, be and they are hereby directed and required to attend before said Master from time to time as he shall direct, and to produce before him all such books, papers, vouchers, and documents and to submit to such oral examination as he may direct and require.

VIII.

That plaintiff recover of defendants, Sumter Electrical Company, and Splitdorf Electrical Company, its disbursements of this suit to be taxed, and have execution against said defendant corporations therefor.

IX.

That the defendants Henry Joseph Podlesak and Tesla Emil Podlesak have not heretofore made, used or sold devices in infringement of plaintiff's rights under any of said letters patent and that no sufficient proof of contributory in-

fringement thereof by them or either of them appears, and therefore that no injunction shall be issued nor accounting be had herein against them or either of them. The bill is dismissed as to the Podlesaks without costs.

A. L. SANBORN,
United States District Judge.

Entered April 4, 1919.

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1050

PETITION FOR APPEAL.

P

Splitdorf Electrical Company, one of the defendants named in the above entitled cause, conceiving itself aggrieved by the decree made and entered in said cause on the 4th day of April, 1919, does hereby appeal from said decree to the United States Circuit Court of Appeals for the Seventh Circuit, for the reasons specified in the assignment of errors which is filed herewith, and prays that the appeal may be allowed and that a transcript of the record and proceedings and papers upon which said decree was made, duly authenticated, may be sent to the said Court of Appeals.

Your petitioner further prays that said appeal may be allowed to operate as a supersedeas, and that the operation of said decree may be stayed and suspended pending a determination of said appeal.

SPLITDORF ELECTRICAL COMPANY,
By EDWARD RECTOR
DAVID B. GANN,
Its Solicitors.

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1051

ASSIGNMENT OF ERRORS.

A

Now comes Splitdorf Electrical Company, one of the defendants in the above entitled cause, and says that in the record and proceedings therein there is manifest error, and that the District Court of the United States for the Northern District of Illinois, Eastern Division, erred in this, to-wit:

1. In entering the decree entered in said cause on April 4, 1919.
2. In decreeing any relief to the plaintiff against the de-

defendants Splitdorf Electrical Company and Sumter Electrical Company, or either of them, and in not dismissing the bill of complaint as to said defendants, and each of them.

3. In decreeing that United States Letters Patent No. 1,280,105, granted September 24, 1919, to plaintiff, Webster Electric Company on the application of Edmund Joseph Kane, for improvements in Electric Igniters, are good and valid in law, and that plaintiff Webster Electric Company is the sole and exclusive owner of said Letters Patent and of all rights and privileges thereunder; and in not decreeing 1052 that said Letters patent are invalid and void.

4. In decreeing that the defendants, Sumter Electrical Company and Splitdorf Electrical Company, or either of them, had infringed claims 3, 7 and 8 of said Letters Patent No. 1,280,105, and claims 1, 2, 3, 7, 8, 9, 15, 21 and 22 of said Letters Patent No. 13,878, and claims 1, 2, 3, 6, 11 and 12 of said Letters Patent No. 1,101,956, or either of said claims, or any claims of said Letters Patent or either of them, or had in any manner violated the rights of plaintiff under said Letters Patent or either of them.

5. In decreeing that a perpetual writ of injunction be issued against the said defendants Sumter Electrical Company and Splitdorf Electrical Company, or either of them, enjoining and restraining them, or either of them, and their officers, agents, attorneys, clerks, servants, workmen, representatives, and all others under the control or direction, of either of them, from directly or indirectly manufacturing, using, selling, disposing of, offering for sale, offering to dispose of, or advertising the machines exemplified by plaintiff's Exhibit No. 44, defendants' machine Type A; plaintiff's Exhibit No. 79, defendants' machine Type B; and plaintiff's Exhibit No. 45, defendants' machine Type C; or either of said machines, or from doing any of the things so enjoined and restrained; and from doing any of said things in respect to any other machine embodying the inventions claimed in claims 3, 7 and 8 of said Letters Patent No. 1,280,105, claims 1, 2, 3, 7, 8, 9, 15, 21 and 22 of said Letters Patent No. 13,878, or claims 1, 2, 3, 6, 11 and 12 of said Letters Patent No. 1,101,956, or either of said claims, and from in any manner infringing any of said claims or violating plaintiff's rights thereunder, and from in any manner aiding, assisting or cooperating with others so to do.

1053 6. In failing to find and decree that by virtue of the

rights acquired by the defendants Sumter Electrical Company and Splitdorf Electrical Company from the defendants Henry Joseph Podlesak and Tesla Emil Podlesak, to and under the said Letters Patent Reissue No. 13,878 and No. 1,101,956, said defendants, Sumter Electrical Company and Splitdorf Electrical Company, had the right and license to use the inventions described and claimed in said Letters Patent and each of them.

7. In failing to find and decree that because of the contractual relations existing between the plaintiff, Webster Electric Company, and the defendants Henry Joseph Podlesak and Tesla Emil Podlesak, and because of the rights vested in said Podlesaks under and by virtue of their contracts with the plaintiff, said plaintiff was and is estopped to assert the aforesaid, Kane patent No. 1,280,105, or any claim thereof, against the said Podlesaks or any assignee of their rights under their contracts with plaintiff, and that by virtue and because of the assignment by said Podlesaks of all of their rights under their said contracts to the defendants, Sumter Electrical Company and Splitdorf Electrical Company, said defendants became vested with all of the rights of said Podlesaks under their said contracts with plaintiff and were put in the same relation to the plaintiff as before existed between the plaintiff and said Podlesaks, and that the plaintiff therefore was and is estopped to assert said Kane patent, or any claim thereof, against the said defendants Sumter Electrical Company and Splitdorf Electrical Company.

8. In decreeing that a perpetual writ of injunction be issued against the defendants Sumter Electrical Company and Splitdorf Electrical Company, or either of them, enjoining and restraining them, or either of them, and their officers, agents, attorneys, clerks, servants, workmen, representatives, and all others under the control or the direction of either of them, from directly or indirectly using the name "Podlesak" on or in connection with the sale of, or in advertisement of any apparatus of the class described in said Letters Patents Nos. 947,647, 948,483, 1,003,649, 1,022,642, 1,056,360, 1,098,052, 1,098,754, 1,101,956 and reissue No. 13,878, or either of them.

9. In decreeing that a perpetual writ of injunction be issued against the said defendants Sumter Electrical Company and Splitdorf Electrical Company or either of them, enjoin-

ing and restraining them, or either of them, and their officers, agents, attorneys, clerks, servants, workmen, representatives, and all others in privity with them, or under the control of direction of either of them, from doing or procuring to be done anything in derogation of the right of plaintiff, Webster Electric Company, to institute, maintain and control suits, either in the name of Webster Electric Company, Splitdorf Electrical Company, Sumter Electrical Company, and others, or any of them, as plaintiff may determine, for the infringement of said United States Letters Patent Nos. 947,647, 948,483, 1,003,649, 1,002,642, 1,056,360, 1,098,052, 1,098,754, 1,101,956 or reissue No. 13,878, or either of them, and from directly or indirectly interfering with obstructing or in any manner opposing or aiding others to oppose the institution, maintenance, and control of any such suit by plaintiff.

10. In decreeing that plaintiff recover of said defendants Sumter Electrical Company and Splitdorf Electrical Company, or either of them, any damages or profits, and in referring the cause to a Master to take and state an account of damages and profits recoverable by plaintiff from 1055 said defendants, and report the same to the court; and in decreeing that said defendants and their officers, agents, attorneys, clerks, servants, workmen, representatives and all others in privity with them or under the control or the direction of either of them, attend before said Master from time to time as he shall direct, and produce before him all such books, papers, vouchers and documents, and submit to such oral examination, as he may direct and require.

11. In decreeing that plaintiff recover of said defendants Sumter Electrical Company and Splitdorf Electrical Company, or either of them, its disbursements of suit to be taxed, and have execution against said defendants, or either of them, therefor.

12. In failing to sustain the counter-claim of the defendants, Sumter Electrical Company and Splitdorf Electrical Company, and in failing to decree that Webster Electric Company, plaintiff, account to said defendants, as the successors in interest and assignees of the defendants, Podlesaks, for the royalties payable to said Podlesaks under the contracts set forth in the bill and answer and referred to in said counter-claim; and in failing to decree that said defendants, Sumter Electrical Company and Splitdorf Electrical Company,

recover of the plaintiff, Webster Electric Company, their costs of suit, to be taxed, and have execution against said plaintiff therefor.

SPLITDORF ELECTRICAL COMPANY,
Defendant,
 EDWARD RECTOR
 By DAVID B. GANN
Its Solicitors.

1056 * . . . *

ORDER ALLOWING APPEAL AND SUPERSEDEAS.

On motion of the solicitor for Splitdorf Electrical Company, defendant in the above entitled cause, it is ordered that the appeal of said defendant from the decree entered in said cause on the 4th day of April, 1919, be and the same is hereby allowed; and that upon the filing of a good and sufficient bond in the penal sum of five thousand dollars (\$5000.00), to be approved by the court, conditioned to secure to the plaintiff all profits, damages and costs that may be awarded against said defendant, and the filing of cost bond in the sum of two hundred dollars (\$200.00), said appeal shall operate as a supersedeas.

And defendant having filed, and submitted to the court for its approval, supersedeas and cost bonds in the amounts above specified, it is further Ordered that said bonds be and the same are hereby approved, and that said appeal operate as a supersedeas, and that the operation of said decree appealed from be stayed and suspended until a determination of said appeal.

A. L. SANBORN
U. S. District Judge

1057 * . . . *

COST BOND ON APPEAL

Know All Men by these Presents that we, Splitdorf Electrical Company, a corporation organized and existing under and by virtue of the laws of the State of New Jersey, as principal, and United States Fidelity & Guaranty Company a Maryland Corporation as surety, are held and firmly bound unto Webster Electric Company, a corporation organized and existing under and by virtue of the laws of the State of Wisconsin, in the full and just sum of Two Hundred Dollars

Supersedeas Bond.

(\$200.00) to be paid to said Webster Electric Company, its successors or assigns, to which payment, well and truly to be made, we bind ourselves, our successors, heirs, executors and administrators, jointly and severally, firmly by these presents. Sealed with our seals and dated this 15th day of April, 1919.

Whereas, heretofore, on April 4, 1919, at a session of the United States District Court, for the Eastern Division of the Northern District of Illinois, in a suit pending in said court between said Webster Electric Company, plaintiff, and 1058 said Splitdorf Electrical Company and others, defendants, a decree was rendered in favor of said plaintiff, granting an injunction and accounting against said Splitdorf Electrical Company, defendant, with plaintiff's costs and disbursements to be taxed:

And whereas, said Splitdorf Electrical Company has prayed and been allowed an appeal from said decree to the United States Circuit Court of Appeals for the Seventh Circuit;

Now the condition of the above obligation is such that if the said Splitdorf Electrical Company shall prosecute its said appeal to effect, and shall answer all damages and costs decreed against it if it shall fail to make its plea good, then the above obligation to be void; otherwise to remain in full force and virtue.

SPLITDORF ELECTRICAL CO

(Corp Seal)

By P J LANDEMORE

Attest:

Treasurer.

R W SUTHERLAND

Secretary.

(Seal)

UNITED STATES FIDELITY & GUARANTY COMPANY

(Corp Seal)

By S. FRANK HEDGES

Attest:

Attorney in Fact

WILLIAM H. ESTWICK

Attorney in Fact.

(Endorsed) Filed Apr. 22, 1919, T. C. MacMillan, Clerk.
1059 *

SUPERSEDEAS BOND

Know All Men by these Presents that we, Splitdorf Electrical Company, a corporation organized and existing under and by virtue of the laws of the State of New Jersey, as principal, and United States Fidelity & Guaranty Company, a Maryland Corporation, as surety, are held and firmly bound unto Webster Electric Company, a corporation organized and

existing under and by virtue of the laws of the State of Wisconsin, in the full and just sum of Five Thousand Dollars (\$5,000.00) to be paid to said Webster Electric Company, its successors or assigns, to which payment, well and truly to be made, we bind ourselves, our successors, heirs, executors and administrators, jointly and severally, firmly by these presents. Sealed with our seals and dated this 15th day of April, 1919.

Whereas, heretofore, on April 4, 1919, at a session of the United States District Court, for the Eastern Division of the Northern District of Illinois, in a suit pending in said court between said Webster Electric Company, plaintiff, and 1060 said Splitdorf Electrical Company and others, defendants, a decree was rendered in favor of said plaintiff, granting an injunction and accounting against said Splitdorf Electrical Company, defendant, with plaintiff's costs and disbursements to be taxed;

And whereas, said Splitdorf Electrical Company has prayed and been allowed an appeal from said decree to the United States Circuit Court of Appeals for the Seventh Circuit;

Now the condition of the above obligation is such that if the said Splitdorf Electrical Company shall prosecute its said appeal to effect, and shall answer all damages and costs decreed against it if it shall fail to make its plea good, then the above obligation to be void; otherwise to remain in full force and virtue.

SPLITDORF ELECTRICAL CO

By P J LANDEMORRE

Treasurer

(Corp Seal)

Attest:

R. W. SUTHERLAND

Secretary.

UNITED STATES FIDELITY & GUARANTY COMPANY

by S. FRANK HEDGES

Attorney-in-Fact

(Corp Seal)

Attest:

WILLIAM H. ESTWICK

Attorney in Fact

(Seal)

(Endorsed) Filed April 22-1919, T. C. MacMillan, Clerk.

UNITED STATES CIRCUIT COURT OF APPEALS

27.

For the Seventh Circuit.

| | |
|-------------------------------|----------------------------|
| Splitdorf Electrical Company, | } |
| <i>Defendant-Appellant</i> | |
| 2784 vs. | } |
| Webster Electric Company, | |
| | <i>Plaintiff-Appellee.</i> |

STIPULATION.

It is hereby stipulated by and between counsel for the respective parties to the above entitled cause that the Clerk of the Court of Appeals may add to the transcript therein, and print at the proper place in the printed record, the attached copy of the order of May 6, 1919, in said cause, which was inadvertently omitted from said transcript.

WILLIAMS, BRADBURY & LEE,
Counsel for Plaintiff-Appellee.

EDWARD RECTOR
Of Counsel for Defendant-Appellant

(Endorsed) Filed Jan. 26, 1920. Edward M. Holloway,
Clerk.

19.

ORDER.

Pursuant to stipulation of parties filed herein, and on motion of solicitor for the defendant-appellant Splitdorf Electrical Company, it is hereby Ordered that the time within which said defendant-appellant shall docket its appeal in this cause and file the record thereof with the Clerk of the Court of Appeals be and the same is hereby enlarged and extended to and including July 1, 1919.

A. L. SANBORN
U. S. District Judge.

May 6, 1919.

ORDER

June 27, 1919.

Present: Hon. George T. Page, Circuit Judge.

Pursuant to the stipulation of the parties filed herein, and for good cause shown, it is ordered that the time within which the defendant-appellant Splitdorf Electrical Company shall docket its appeal and file the record thereof with the Clerk of the Court of Appeals be and the same is hereby extended to and including August 31, 1919.

Judge.

1062 * * * *

ORDER

August 21-1919.

Pursuant to the stipulation of the parties filed herein, and for good cause shown, it is ordered that the time within which the defendant-appellant Splitdorf Electrical Company shall docket its appeal and file the record thereof with the Clerk of the Court of Appeals be and the same is hereby extended to and including September 30, 1919.

SAMUEL ALSCHULER

Judge.

1063 * * * *

ORDER

Sept. 22-1919.

Pursuant to the stipulation of the parties filed herein, and for good cause shown, it is ordered that the time within which the defendant-appellant Splitdorf Electrical Company shall docket its appeal and file the record thereof with the Clerk of the Court of Appeals be and the same is hereby extended to and including October 31, 1919.

Enter:

CARPENTER

Judge.

22 Sept. 1919.

1064 * * * *

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PRAECIPE FOR TRANSCRIPT

To the Clerk of the Court:

You are respectfully requested to prepare and forward to the Clerk of the United States Circuit Court of Appeals for the Seventh Circuit a transcript of the record in the above entitled cause for use in connection with the appeal therein from the decree entered in said cause of April 4, 1919, and to include in said transcript the following papers, proceedings and exhibits, eto-wit:

All of the pleadings, including the exhibits attached to and forming part thereof.

Statement of evidence in narrative form.

All exhibits introduced in evidence by either party.

Opinion of Court filed February 13, 1919.

Decree entered April 4, 1919.

Petition on appeal.

Assignment of errors.

Order allowing appeal and supersedeas.

Cost Bond on appeal.

Supersedeas bond

Citation.

Orders of court enlarging and extending time for docketing appeal and filing transcript of record in the United States Circuit Court of Appeals.

Præcipe for transcript.

Stipulation.

EDWARD RECTOR

DAVID B. GANN

Solicitors for Defendant

Splitdorf Electrical Company

(Endorsed) Filed Oct. 29-1919, John H. R. Jamar, Clerk.
1066 * * * * *

STIPULATION.

It is hereby stipulated and agreed by and between counsel for the respective parties to the above entitled cause that the Clerk may certify the foregoing pages to the United States Circuit Court of Appeals as a full response to the praecipe for the transcript on appeal in this cause, and as a true transcript of the record upon such appeal.

It is further stipulated that the Clerk may send to the Clerk in the United States Circuit Court of Appeals all of the original exhibits in this cause, both documentary and physical instead of including copies of any thereof in said transcript.

WILLIAMS, BRADBURY & SEE,
Solicitors for Plaintiff.
 EDWARD RECTOR,
 DAVID B. GANN,
Solicitors for Defendant,
Splitdorf Electrical Company.

(Endorsed) Filed Oct 29 1919 John H R Jamar Clerk

1067 (Endorsed) copy 553 Webster Electric Co., vs Splitdorf Electrical Company, et al, Stipulation. Filed Oct 29 1919 at o'clockM John H. R. Jamar Clerk

1068 Northern District of Illinois }
 Eastern Division } ss.

I, John H. R. Jamar, Clerk of the District Court of the United States for the Northern District of Illinois, do hereby certify the above and foregoing to be a true and complete transcript of the proceedings had of record made in accordance with Praecipe filed in this Court in the cause entitled Webster Electric Company, plaintiff, vs. Henry Joseph Podlesak, Tesla Emil Podlesak, Sumter Electrical Company, and Splitdorf Electrical Company, Defendants, No. 553, as the same appear from the original records and files thereof, now remaining in my custody and control.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court at my office, in the City of Chicago, in said District, this day of October, A. D. 1919.

JOHN H R JAMAR
Clerk.

(Seal)

1069

Copy

United States }
of America, } ss.

The President of the United States, To Webster Electric Company Greeting:

You are hereby cited and admonished to be and appear at a United States Circuit Court of Appeals, for the Seventh Circuit, to be holden at Chicago, within thirty days from the date hereof, pursuant to an appeal filed in the Clerk's Office of the District Court of the United States for the Northern District of Illinois, Eastern Division, wherein Splitdorf Electrical Company is appellant and you are appellee to show cause, if any there be, why the decree rendered against the said Splitdorf Electrical Company as in the said writ of error mentioned, should not be corrected and why speedy justice should not be done to the parties in that behalf.

Witness the Honorable A L Sanborn Judge of the District Court of the United States, this 22nd day of April, in the year of our Lord one thousand nine hundred and nineteen

(Signed) A. L. SANBORN

Judge

Service of the foregoing citation acknowledged this 22nd day of April, 1919.

WILLIAMS BRADBURY & LEE

*Solicitors for Webster Electric
Company Appellee*

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

I, Edward M. Holloway, Clerk of the United States Circuit Court of Appeals for the Seventh Circuit, do hereby certify that the foregoing pages, numbered from 1 to 822, inclusive, contain a true copy of the printed record printed under my supervision which together with the printed book of exhibits constitutes the record upon which the following cause was heard and determined

Splitdorf Electrical Company

vs.

Webster Electric Co.

No. 2769, October Term, 1921, as the same remains upon the files and records of the United States Circuit Court of Appeals, for the Seventh Circuit.

In testimony whereof I hereunto subscribe my name and affix the seal of said United States Circuit Court of Appeals for the Seventh Circuit, at the City of Chicago, this twenty-fifth day of July, 1922.

(Seal) EDWARD M. HOLLOWAY,
*Clerk of the United States Circuit Court of
Appeals for the Seventh Circuit.*



At a regular term of the United States Circuit Court of Appeals for the Seventh Circuit, begun and held in the United States court room in the City of Chicago, in said Seventh Circuit, on the seventh day of October, 1919, of the October term, in the year of our Lord one thousand nine hundred and nineteen, and of our independence the one hundred and forty-fourth.

And afterwards, to wit, on the seventh day of November, 1919, in the October term last aforesaid, there was filed in the office of the Clerk of this Court a certain appearance of counsel for appellant, which said appearance is in the following words and figures, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

No. 2769. October Term, 1919.

Splitdorf Electrical Company }
 vs.
Webster Electric Company. }

The Clerk will enter my appearance as Counsel for the Appellant.

EDWARD RECTOR.

Note.—Must be signed by a member of the Bar of the United States Circuit Court of Appeals, for the Seventh Circuit. Individual and not firm names must be signed.

Endorsed: Filed Nov. 7, 1919. Edward M. Holloway, Clerk.

And afterwards, to wit, on the twenty-sixth day of January, 1920, in the October term last aforesaid, there were filed in the office of the Clerk of this Court a certain stipulation with an order entered in the District Court attached, the said stipulation and order are in the following words, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

Filed Jan. 26, 1920, Edward M. Holloway, Clerk.

| | |
|-------------------------------|---|
| Splitdorf Electrical Company, | } |
| Defendant-Appellant, | |
| 2769 vs. | |
| Webster Electric Company, | |
| Plaintiff-Appellee. | } |

STIPULATION.

It is hereby stipulated by and between counsel for the respective parties to the above entitled cause that the Clerk of the Court of Appeals may add to the transcript therein, the reprint at the proper place in the printed record, the attached copy of the order of May 6, 1919, in said cause, which was inadvertently omitted from said transcript.

WILLIAMS, BRADBURY & LEE,

Counsel for Plaintiff-Appellee.

EDWARD RECTOR,

Of Counsel for Defendant-Appellant.

UNITED STATES DISTRICT COURT

Northern District of Illinois

Eastern Division.

| | |
|---|-------------------------|
| Webster Electric Company, | } In Equity No. 553. |
| <i>Plaintiff,</i> | |
| <i>vs.</i> | |
| Henry Joseph Podlesak, Tesla Emil Podlesak, Sumter Electrical Com- pany, and Splitdorf Electrical Company, | |

ORDER.

Pursuant to stipulation of parties filed herein, and on motion of solicitor for the defendant-appellant Splitdorf Electrical Company, it is hereby Ordered that the time within which said defendant-appellant shall docket its appeal in this cause and file the record thereof with the Clerk of the Court of Appeals be and the same is hereby enlarged and extended to and including July 1, 1919.

A. L. SANBORN,
U. S. District Judge.

May 6, 1919.

And afterwards, on the same day, to wit: on the twenty-sixth day of January, 1920, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

Monday, January 26, 1920.

Court met pursuant to adjournment.

Present:

Hon. Francis E. Baker, Circuit Judge, presiding.

Hon. Samuel Alschuler, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

Edward M. Holloway, Clerk.

Before:

Hon. Samuel Alschuler, Circuit Judge.

| | | |
|------------------------------|---|---|
| Splitdorf Electrical Company | } | Appeal from the District Court Court of the United States for the Northern District of Illinois, Eastern Division. |
| vs. | | |
| Webster Electric Company. | } | |

Upon the filing of a stipulation of counsel, it is ordered that a copy of the order of the District Court of the United States for the Northern District of Illinois, Eastern Division, entered on May 6, 1919, be, and the same is hereby added to the transcript of the record in this cause and be printed in the proper place in the printed record.

And afterwards, to wit: on the twentieth day of April, 1920, in the October term last aforesaid, there were filed in the office of the Clerk of this Court certain appearances of counsel, which said appearances are in the following words and figures, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

October Term, 1919.

Webster Electric Company }
 vs. } No. 2769.
Splitdorf, etc. }

The Clerk will enter my appearance as Counsel for the Webster Electric Company.

BENJAMIN V. BECKER.

Note—Must be signed by a member of the Bar of the United States Circuit Court of Appeals, for the Seventh Circuit. Individual and not firm names must be signed.

Endorsed: Filed April 20, 1920. Edward M. Holloway, Clerk.

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

October Term, 1919.

Webster Electric Company }
 vs. } No. 2769.
Splitdorff, etc. }

The Clerk will enter my appearance as Counsel for the Webster Electric Company.

JEROME N. FRANK.

Note—Must be signed by a member of the Bar of the United States Circuit Court of Appeals, for the Seventh Circuit. Individual and not firm names must be signed.

Endorsed: Filed April 20, 1920. Edward M. Holloway, Clerk.

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

October Term, 1919.

Webster Electric Company }
 vs. } No. 2769.
Splittdorff, etc. }

The Clerk will enter my appearance as Counsel for the Webster Electric Company.

IRWIN T. GILRUTH.

Note—Must be signed by a member of the Bar of the United States Circuit Court of Appeals, for the Seventh Circuit. Individual and not firm names must be signed.

Endorsed: Filed April 20, 1920. Edward M. Holloway, Clerk.

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

October Term, 1919.

Webster Electric Company }
 vs. } No. 2769.
Splittdorf, etc. }

The Clerk will enter my appearance as Counsel for the Webster Electric Company.

JOHN P. BARNES.

Note—Must be signed by a member of the Bar of the United States Circuit Court of Appeals, for the Seventh Circuit. Individual and not firm names must be signed.

Endorsed: Filed April 20, 1920. Edward M. Holloway, Clerk.

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

October Term, 1919.

Splitdorf Electrical Co.,
 Appellant, }
 vs. } No. 2769.
Webster Electric Co.,
 Appellee. }

The Clerk will enter my appearance as Counsel for the Appellee.

LIVINGSTON GIFFORD,
LYNN A. WILLIAMS,
CLIFFORD C. BRADBURY,
ROBERT M. SEE.

Note—Must be signed by a member of the Bar of the United States Circuit Court of Appeals, for the Seventh Circuit. Individual and not firm names must be signed.

Endorsed: Filed April 20, 1920. Edward M. Holloway,
Clerk.

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

October Term, 1919.

Splitdorf Electrical Co. }
 vs. } No. 2769.
Webster Electric Co. }

The Clerk will enter our appearance as Counsel for the Appellant.

DAVID B. GANN.

CHARLES L. STURTEVANT,

Washington, D. C.

EUGENE G. MASON.

Note—Must be signed by a member of the Bar of the United States Circuit Court of Appeals, for the Seventh Circuit. Individual and not firm names must be signed.

Endorsed: Filed April 20, 1920. Edward M. Holloway, Clerk.

Tuesday, October 5, 1920.

Court opened by proclamation of crier.

At a regular term of the United States Circuit Court of Appeals for the Seventh Circuit begun and held in the United States Court Room in the City of Chicago in said Seventh Circuit on the fifth day of October, 1920, of the October term in the year of our Lord One Thousand Nine Hundred and Twenty and of our Independence the One Hundred and Forty-fifth.

And afterwards, to wit: on the fifth day of October, 1920, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

Present:

Hon. Francis E. Baker, Circuit Judge, presiding.

Hon. Samuel Alschuler, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

Edward M. Holloway, Clerk.

John J. Bradley, Marshal.

Before:

Hon. Francis E. Baker, Circuit Judge.

Hon. Samuel Alschuler, Circuit Judge.

Hon. George T. Page, Circuit Judge.

| | |
|------------------------------|---|
| Splitdorf Electrical Company | } Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division. |
| 2769 <i>vs.</i> | |
| Webster Electric Company. | |

It is ordered by the Court that this cause be, and the same is hereby set down for hearing on November 4, 1920.

And afterwards, to wit: on the fourth day of November, 1920, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

Thursday, November 4, 1920.

Court met pursuant to adjournment and was opened by proclamation of crier.

Present:

Hon. Francis E. Baker, Circuit Judge, presiding.

Hon. Samuel Alschuler, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

Edward M. Holloway, Clerk.

John J. Bradley, Marshal.

Before:

Hon. Francis E. Baker, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

| | | |
|-------------------------------|---|---|
| Splitdorf Electrical Company | } | Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division. |
| 2769 vs. | | |
| Webster Electric Company. | | |

Now this day come the parties by their counsel, and this cause now comes on to be heard on the printed record and briefs of counsel and on oral argument by Mr. Edward Reector, counsel for appellant, and by Mr. Livingston Gifford, counsel for appellee, and the court having heard the same takes this matter under advisement.

And afterwards, to wit: on the fifth day of February, 1921, in the October term last aforesaid, there was filed in the office of the Clerk of this Court a certain opinion, which said opinion is in the following words and figures, to wit:

IN THE UNITED STATES CIRCUIT COURT OF APPEALS,
For the Seventh Circuit.

No. 2769. October Term, 1920, January Session, 1921.

| | |
|-------------------------------|---|
| Splitdorf Electrical Company, | } Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division. |
| <i>Appellant</i> | |
| <i>vs.</i> | |
| Webster Electric Company, | } |
| <i>Appellee.</i> | |

Before BAKER, EVANS and PAGE, *Circuit Judges*.

EVANS, *Circuit Judge*: The present appeal involves three patents, the determination of two of which, Nos. 1,101,956 and reissue No. 13,878, turns upon a certain agreement made between the patentees, Henry and Emil Podlesak, and appellee. The assignable rights of the patentees in these two patents were, prior to the commencement of this suit, assigned to appellant.

The Podlesaks entered into two license agreements with appellee on the same date, Feb. 5, 1914. These contracts were subsequent to other contracts made between the same parties and out of which difficulties had arisen. One of these simultaneously executed agreements deals with six patents, two of which are the ones above enumerated and in which alone we are concerned. The other agreement was an exclusive license contract affecting other patents, none of which are before us. The latter contract, therefore, is of importance only as it may bear on the construction of the one under consideration.

The so-called "License Agreement (Shop Right)" is in part set forth at the bottom of this opinion for reference sake. The difference between counsel is limited to the assignable rights of the Podlesaks. The trial judge accepted the urge of appellee and found from the entire agreement an intention to deny to the patentees any assignable reserved right to make and sell the patented articles.

Prior to entering into this agreement, patentees had the unlimited right to make and sell their patented articles and this right was of course assignable in whole or in part. They likewise had the right to exclude all others from making or selling the articles. To what extent were these rights restricted, if at all, by this agreement?

The precise language of the contract is significant. After first reciting that appellee

"is desirous of securing a *shop right* and license to manufacture, use and sell the invention"

it provided by its only granting clause

"that patentees do hereby grant unto the party of the second part a *shop right* and license to manufacture, use

LICENSE AGREEMENT.

(SHOP RIGHT.)

• • • • •

And Whereas the party of the second part is desirous of securing a shop right and license to manufacture, use, and sell the inventions and improvements, described and claimed in above said patents, and applications for patents, all or any one of them, the validity of which patents, granted or to be granted, is admitted and to bring and maintain suits against infringers of the patent rights covering the said inventions, within and throughout the United States of America and Territories thereof, and for and during the life of any and all of the patents, and patents that may be granted, on any of the applications described below, or any of them:

Now, Therefore in consideration of One Dollar (\$1.00) by the party of the second part to the parties of the first part, in hand paid, and of the covenants and agreements of the party of the second part, hereinafter expressed and to be kept and performed, the parties of the first part do hereby grant unto the party of the second part a shop right and license to manufacture, use, and sell the inventions or improvements, and each and every one of them, described, set forth and claimed in said patents, numbers 1,022,642, 1,055,076 and 1,056,360, and said applications, serial numbers 734,143; 668,153; and 639,738 and any division or divisions thereof, within and throughout the United States of America and Territories and Possessions thereof, for and during the term of said patents or any of them; and the parties of the first part agree that they have good right and lawful authority to grant said shop right and license, and that they have not heretofore parted with any right, license or privilege inconsistent therewith and that they will not, while this shop license to the party of the second part is in force, give or grant shop licenses to others to make, use, or sell hereinsaid inventions, expressly reserving, however, the right to themselves to make, use and sell the hereinsaid inventions.

Second: The parties of the first part agree to and with the party of the second part that they, and each of them will aid and assist each other in the prosecution of said applications and the obtaining of patents thereon and in any interference proceeding relating to their right of priority to said inventions, and in any suit or proceeding brought under any of the said patents or for the infringement of any patents by reason of the manufacture, use or sale, by the party of the second part of the inventions described in said patents or applications; provided, however, that said parties of the first part shall not be called upon to pay out or expend any money in any suit or proceeding relating to the said inventions, and the parties of the first part hereby appoint the attorney for the party of the second part as their agent and

and sell the inventions * * * set forth and claimed in said patents."

The patentees further agreed, and this is significant because it is this agreement that appellee relies upon in support of its contention, that they

"will not * * * give or grant *shop rights to others* to make, use or sell hereinsaid inventions."

Patentees immediately thereafter provided as follows:

"expressly reserving, however, the right to themselves to make, use and sell the hereinsaid inventions."

After numerous other provisions,

"it is agreed that this assignment shall extend to and be binding upon the heirs, *assigns*, and legal representatives of the party of the first part, and the successors and *assigns* of the party of the second part."

We have, then, a contract, the legal effect and the express provisions of which provide for patentees' right to manufacture and sell, and further that such rights as patentees reserved are expressly made assignable. It would therefore seem to follow inevitably that appellant, by its purchase of

attorney for the purpose of joining them as parties complainant where necessary or desirable, in any suit which the party of the second part may wish to bring on account of the infringement of any of said Letters Patent or any patent which may be granted upon their aforesaid applications, the said attorney for the party of the second part to have the power to execute as the attorney and agent of the parties of the first part any papers which may be necessary or convenient to the commencement and maintenance of any such suit, it being expressly understood and agreed, however, that the parties of the first part are not to be put to any expense or to be required to expend any moneys, on account of any such infringement suits to which they may be made parties complainant, and it is expressly understood and agreed, further, that the said parties of the first part shall be exempt from liability in damages or court costs resulting from any law suits in which the parties of the first part may thus be joined with the party of the second part, the party of the second part agreeing to assume the payment of any and all damages and court costs that may result from any such suits.

* * * * *

Sixth: The party of the second part agrees that it will, except as hereinafter provided, use any devices manufactured under this shop license only in connection with, or for repairs to, the device manufactured under license which is covered by the agreement made on February 5th, 1914, by which the parties of the first part give to the party of the second part the exclusive and sole right to manufacture ignition devices covered by patents No. 947,647, of January 25, 1910, Inductor Generators for Ignition Purposes, No. 949,483, issued February 8, 1910, Inductor Generators for Ignition Purposes, and No. 1,003,649, issued September 19, 1911, Inductor Generators for Ignition purposes, and that whenever the devices covered by this shop right and license are made and sold and delivered not as a part, of, or for use in connection with, the devices manufactured and sold under the aforesaid exclusive license dated February 5th, 1914, then the party of the second part agrees that it will on the day of each and every report pay to the parties of the first part, jointly as a royalty or license fee, five per cent (5%) of all moneys or the

patentees' rights, acquired the right to make and sell the patented articles.

But appellee stresses the provision (par. No. 8) as well as the provision found in par. No. 3, contending that covenant 8 negatives any intention to reserve any assignable right to make and sell the patented articles.

We are, however, unable to draw any deductions from par. 8 favorable or unfavorable to appellee. This provision added nothing to the rights of either party. It was surplusage. For certainly new or added agreements might be made respecting shop rights or other licenses, provided the parties agreed to them in writing.

As to covenant No. 3, we see nothing absolutely inconsistent between it and the assignability clause of the agreement, while there is a fatal inconsistency between such assignability clause and appellee's position. For assignment by patentees of all their rights including the right to make and sell is not necessarily inconsistent with the assignor's agreement not to execute a shop right to others. The court's duty, if possible,

equivalent thereof, which they may have received or that may be due them from the sales of or in exchange for the devices covered by this shop right and license sold and delivered during the preceding quarter. It is further expressly understood and agreed that the said devices manufactured embodying above improvements, or any of them, are not to be sold for less than a fair and reasonable price, based upon manufacturing and trade conditions.

Eighth: The party of the second part, with the approval, in writing, of the parties of the first part, shall have right to grant shop right or license for the manufacture, use and sale of devices embodying the invention described and claimed in said patents No. 1,022,642 and No. 1,055,076, to makers of, or dealers in, gas engines, and gas engine accessories, but such shop rights or licenses so granted by the party of the second part shall be on and with the same terms and limitations as hereinbefore set forth, namely; that the devices made under such shop right license shall be used only in connection with, or for repairs for or to, devices made under the hereinbefore mentioned patents No. 947,647,—948,483,—1,003,649, and 1,056,360 and any patents that may be granted on the hereinbefore mentioned applications Serial Nos. 734,143, 668,153, and 639,738, or any of them, and in no other way. The parties of the first part may approve any such shop right or license, to be granted by the party of the second part, either personally or by attorney, or agent.

Ninth: The party of the second part agrees that it shall not permit or encourage other parties to manufacture, use, or sell devices covered by hereinbefore mentioned patents, or patents that may be granted on hereinsaid applications, or any of them, except as, and on terms and limitations hereinbefore set forth, relative to said shop licenses under patents No. 1,022,642 and No. 1,055,076. It is further agreed and understood that this shop license becomes terminated in the case or event the license given in the said agreement of February 5, 1914, becomes, terminated by manner therein provided for.

Finally, It is agreed that this agreement shall extend to and be binding upon the heirs, assigns, and legal representatives of the parties of the first part, and the successors and assigns of the party of the second part.

is to reconcile the two provisions and give effect to both. At least, in any doubtful case, the express provision authorizing assignment must control over a negative agreement which at best only inferentially questions patentees' right to assign their right to make and manufacture.

But further reasons for such conclusion appear. Why did the parties make two agreements instead of one? If the parties intended to give an exclusive license as to some patents and to reserve, as to others, merely the right to make and manufacture the article, it could have been easily so provided and in a single agreement. Why did the parties so carefully throughout the agreement refer to appellee's grant as a "shop right"? If appellee's position be tenable, it secured more than a shop right,—it secured an exclusive license excepting only that patentees reserved the mere personal non-assignable right to make the article. Further queries are suggested. If appellee's position is tenable, would the reserved right to make and sell die with the parties? Could the parties exercise the right as copartners or as a corporation wherein they were the sole stockholders? If one wished to exercise the right and the other did not, were their hands tied?

While we are satisfied that an examination of the contract as heretofore pointed out leads but to one conclusion, these queries are suggested merely to offer additional reasons for concluding that the parties intended to reserve an assignable right to make and sell the patented article.

Again, by par. 3, patentees at most merely agreed not to execute to others, *shop rights*. The words "to others" indicate that the parties were contracting with respect to individuals or corporations *other* than the parties to the contract. In assigning their rights to appellant, patentees were not executing shop rights.

Much stress has been laid on the asserted "equities of the case". We are, however, unable to recognize their pertinency. The contract between appellee and patentees was voluntarily executed. It fixed the rights of both parties. Any enhancement in the value of the patent was unquestionably mutually advantageous. Whether patentees were guilty of ingratitude to their former employers in selling the reserved rights in the patent to a business competitor of such employer is beside the question. That certain rights were reserved by patentees is conceded. That such reserved rights

as were assignable were sold to appellant is also conceded. As between appellant and appellee, then, the issue is solely and simply a question of the extent of the assignable rights so reserved.

THE KANE PATENT. Numerous defenses to the suit, on the Kane patent No. 1,280,109 are presented. Estoppel, invalidity, (based on several grounds) and non-infringement, are all set forth and elaborated and ably argued by both counsel. Whether the specifications as originally drawn are sufficient to support claims seven and eight, inserted some eight years after the application was filed, is a question which we find it unnecessary to determine. Likewise, we are not called upon to disturb the finding of the district court in favor of Kane and against the Milton patent on the issue of priority. We are likewise not called upon to determine whether appellee is estopped to assert certain contested claims in this patent. We have, in other words, concluded that claims seven and eight are invalid for want of patentable novelty.

These two claims read as follows:

"7. In an electrical ignition device for internal combustion engines, the combination of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, *a rigid unitary and integral support upon which all of the aforesaid parts are mounted*, whereby all of said parts may be removed from and returned to their position upon an engine cylinder without disturbing their relations one to another, conductors for carrying electric current from said generating winding to said electrodes, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it.

"8. In an electrical ignition device for internal combustion engines, the combination of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a

predetermined point in the movement of the rotor, a *supporting member upon the several parts of which all of the aforesaid mechanism is mounted and having a single integral part adapted to be attached to the engine*, whereby all of said mechanism may be removed from the engine by removing said single integral part and may be returned to its position upon the engine with unchanged relations between any and all of the parts of all of said mechanism, thereby insuring the predetermined synchronism and interrelated adjustment of said mechanism when it is replaced upon the engine, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it."

The italicized words mark the asserted novelty upon which invention is predicated.

The claims, read alone and without the background of any prior art, appear impressive. To contribute anything that would tend to produce perfect or more exact synchronism between the separation of the electrodes and the tripping of the magneto armature, and between the production of the spark and the cycle of the engine may indeed be accepted as *prima facie* evidence of inventive skill.

But a more thorough study and analysis of these claims as well as an examination of the specifications and the drawings, discloses that Kane was not dealing with the afore-referred to synchronism as such,—was not dealing with the arrangement or the adjustment of the parts of an oscillating magneto, but in respect to these two cooperating parts, he merely connected the magneto generator with the igniter block so that the two might be removed and repaired *as a unitary structure*. True, the removal of such a unitary structure may have made it possible to retain the adjusted relation of the cooperating parts, but it can hardly be said to have in any way affected synchronism as such or the cooperation of the parts of the magneto ignition. Thus explained, without any prior art to enlighten us, it would hardly evidence inventive skill to provide

"a rigid unitary and integral support upon which all of the aforesaid parts are mounted"

or to provide

"a supporting member upon the several parts of which all of the aforesaid mechanism is mounted, and having a single integral part adapted to be attached to the engine"

Kane's structure and his contribution are described by appellant's counsel as follows:

"In this device the magneto and the igniter plug are no longer separated, but are brought into one unitary structure with no link mechanism intervening between the movable electrode and the armature shaft. The spark plug has a flange, which is bolted against the engine cylinder, and this flange carries an integral arm on which the magneto and its associated mechanism are directly mounted. * * * The magneto and the spark plug and the cooperating mechanism are all part of a single unitary structure."

Again,

"When it is necessary to clean the spark plug or to test or adjust the mechanism, the whole unitary structure may be removed, and its operation adjusted and its spark observed in the open, and it may then be put back on the engine with the absolute assurance that it will function in operative position, precisely as it did when removed from the engine."

Was it, then, assuming that Kane was the contributor of this advance, patentable novelty to provide the means whereby the generator was supported by an arm running from the spark plug? Or, in other words, having two elements in a machine which function together, was the mere fixture of the relative position of these two elements, invention?

Unfortunately for appellee, the record contains some pertinent prior art citations. It is necessary to refer to but one, the patent to Weber, No. 820,535. This patent dealt with "an electric igniter and explosive engine". In the specification we find the following description:

"In order that the crank arm and the hammer arm may hold their relative positions with respect to each other intact, I prefer to mount the plate or board upon a horizontal bracket; the inner end of which is provided with a vertical flange secured rigidly to the igniter block."

In other words, this patent discloses an oscillating magneto, the parts of which are mounted upon and carried by the igniter block. It does not appear, however, that the support which operates in connection with the oscillating armature is integrally attached to the igniter block.

But we are, in this instance, not interested in the manner of attachment. Rather must we direct our attention to the

asserted patentable novelty residing in these two claims, seven and eight, which novelty is limited to the mounting of the magneto generator upon the igniter block so that the two may be removed or replaced as a single or unitary structure, thereby retaining the adjusted (and presumably proper) relation of the cooperating parts.

The fact that the Weber patent fails to disclose a mounting element integral with the igniter block is not sufficient to distinguish the citation when it appears that Weber's two elements are rigidly secured together. In other words, it is quite immaterial whether the mounting of the generator upon the block is by a single piece which is integral with the block, or by two pieces securely fastened together. The essence of the contribution was the *unitary structure* made possible by the rigidly and inseparably connected parts, the magneto generator, and the unitary block.

Even if the Weber structure were to fail as a complete anticipation because the generator is not *integrally* connected to the igniter block and because the support aforementioned is not mounted upon the shaft which carries the generator, it nevertheless remains as a valuable citation of the prior art bearing on appellant's defense of invalidity. It sufficiently points the way to a unitary structure so as to preclude any argument being successfully advanced that invention may be predicated upon the introduction of such an element connecting the generator and the plug.

Other prior art citations appear, and may well be referred to, but we are inclined to the view that invention is not disclosed where the only contributions consists of uniting two cooperating elements such as are here disclosed. When once it was made to appear that in the removal of these parts their relation would or possibly might be broken and their predetermined adjustment disturbed, it required but the work of a mechanic to integrally connect them so that synchronism would not be destroyed in their removal or in their replacement. We therefore refrain from further reference to the prior art citations. Certainly with the teachings of Weber before us, the *prima facie* presumption of invention in Kane's contribution is overcome.

Claim three of the Kane patent reads as follows:

"3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating

springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring."

While its validity is also challenged for various reasons, our inquiry has been limited to the defense of non-infringement. The elements which we do not find in appellant's structure have been italicized. We have examined the record and the drawings with the result that we agree with defendant's expert when he said:

"I am unable to find in defendant's type A device the structure, combination, set forth in claim 3 of the Kane patent in suit * * * for the reason that the claim distinctly and definitely calls for its main actuating springs to be connected at one end with the field magnet frame, and for the reason that it definitely calls for the integral yoke member to be rigidly connected with the inductor, neither of which characteristics is true of Defendants' type A device."

The same witness likewise distinguished appellant's type B while the court held that its type C did not infringe this claim three.

Appellee does not dispute the distinction thus pointed out, but asserts that appellant's structure in the respects just alluded to is the mechanical equivalent thereof, and infringement is therefore shown.

We are therefore called upon to determine what breadth we shall give to the claim,—how strictly we shall hold patentee to the literal language of this claim.

Under the circumstances of this case, in view of the history disclosed by the files,—the character of this claim,—we conclude that appellant's structure is not the equivalent

of that described by Kane in claim 3, and infringement does not appear.

The decree is reversed with directions to dismiss.
A true Copy.

Teste:

*Clerk of the United States Circuit Court
of Appeals for the Seventh Circuit.*

And afterwards, on the same day, to wit, on the fifth day in February, 1921, the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

Saturday, February 5, 1921.

Court met pursuant to adjournment.

Present:

Hon. Francis E. Baker, Circuit Judge, presiding.

Hon. Samuel Alschuler, Circuit Judge.

Hon. George T. Page, Circuit Judge.

Edward M. Holloway, Clerk.

Before:

Hon. Francis E. Baker, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

| | | |
|-------------------------------|---|---|
| Splitdorf Electrical Company | } | Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division. |
| 2769 vs. | | |
| Webster Electric Company. | | |

This cause came on to be heard on the transcript of the record from the District Court of the United States for the Northern District of Illinois, and was argued by counsel.

On consideration whereof, It is now here ordered, adjudged and decreed by this Court that the decree of the said District Court in this cause be, and the same is hereby reversed with costs; and that this cause be, and the same is hereby remanded to the said District Court with directions to dismiss.

And afterwards, to wit: On the seventh day of March, 1921, in the October term last aforesaid there was filed in the office of the clerk of this court a certain motion and notice, which said motion and notice is in the following words and figures, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS,
For the Seventh Circuit.

No. 2769.

Splitdorf Electrical Company,
Defendant-Appellant,
vs.
Webster Electric Company,
Plaintiff-Appellee.

MOTION FOR ORAL ARGUMENT ON PETITION FOR
REHEARING.

Plaintiff-appellee moves that the court grant leave for oral argument as to the determination of appellee's petition for rehearing filed herewith.

Our petition for rehearing is directed solely to the question whether claims 7 and 8 of the Kane patent No. 1,280,105 involve patentable invention over the prior art. The petition does not seek the reconsideration of any matter which *was* considered and decided in the court's opinion, but is based wholly upon a vital matter of fact as to which the court's opinion *is silent* but which cannot be ignored in reaching a just conclusion as to the validity of these claims.

The original submission of the case involved the consideration of many complicated questions. The court has considered and decided the effect of the contracts between the Webster Company and the Podlesaks, and has fully considered and decided the validity and scope of claim 3 of the Kane patent. As to these questions, we have nothing more to say.

But the court also held claims 7 and 8 of the Kane patent invalid. The opinion reached this conclusion solely by a consideration of a minor difference between Kane and the

prior art. We have nothing more to say as to this difference which the court did consider.

The vital and essential difference, however, between Kane and the prior art is not referred to in the court's opinion, and we respectfully submit that the opinion indicates a lack of appreciation of this difference which constitutes the essence of the Kane invention.

By our petition for rehearing, we seek to place before the court the vital but unrecognized and unconsidered *facts* as to the distinction between Kane and the prior art, and then to *argue* that the difference does involve invention.

Respectfully,

L. A. W.

R. M. S.

Of Counsel for Plaintiff-Appellee.

Endorsed: Filed March 7, 1921. Edward M. Holloway, Clerk.

UNITED STATES CIRCUIT COURT OF APPEALS,
For the Seventh Circuit.

No. 2769.

Splitdorf Electrical Company,
Defendant-Appellant,
vs.
Webster Electric Company,
Plaintiff-Appellee.

NOTICE.

Edward Rector, Esq.,
Counsel for Appellant,
McCormick Building,
Chicago, Illinois.

Dear Sir:

We are delivering to you herewith a copy of a printed petition for rehearing and of a motion for oral argument on the petition, which we are filing to-day in the Clerk's Office.

L. A. W.

R. M. S.

Of Counsel for Plaintiff-Appellee.

Receipt of a copy of the above notice and of the petition for rehearing and motion referred to therein, at Chicago, Illinois, March 7th, 1921, is hereby acknowledged.

Of Counsel for Defendant-Appellant.

State of Illinois, }
County of Cook. } ss:

J. David Dickenson, being first duly sworn, says that he is a clerk in the employ of Williams, Bradbury, See & McCaleb, at Chicago, Illinois, of Counsel for Plaintiff-Appellee, in the suit of Splitdorf Electrical Company vs. Webster Electric Company No. 2769 in United States Circuit Court of Appeals for the Seventh Circuit; that on March 7th, 1921, he delivered copies of the annexed notice and of the printed petition for rehearing and motion for oral argument on the petition referred to in said notice to a member of the firm of Rector, Hibben, Davis & Macauley at their offices in the McCormick Building, Chicago, Illinois, Mr. Rector being of Counsel for Defendant-Appellant.

J. D. D.

Subscribed and sworn to before me at Chicago, Illinois, March 7th, 1921.

E. V. G.

Notary Public.

And afterwards, to wit: On the eighth day of March, 1921, in the October term last aforesaid there was filed in the office of the clerk of this court a certain notice which said notice is in the following words and figures, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS,
For the Seventh Circuit.

No. 2769.

Splitdorf Electrical Company,
Defendant-Appellant,
vs.
Webster Electric Company,
Plaintiff-Appellee.

NOTICE.

Edward Rector, Esq.,
Counsel for Appellant,
McCormick Building,
Chicago, Illinois.

Dear Sir:

We are delivering to you herewith a copy of a printed petition for rehearing and of a motion for oral argument on the petition, which we are filing to-day in the Clerk's Office.

LYNN A. WILLIAMS,
ROBERT M. SEE,
Of Counsel for Plaintiff-Appellee.

Receipt of a copy of the above notice and of the petition for rehearing and motion referred to therein, at Chicago, Illinois, March 7th, 1921, is hereby acknowledged.

Of Counsel for Defendant-Appellant.

State of Illinois, }
County of Cook. } ss:

J. David Dickinson, being first duly sworn, says that he is a clerk in the employ of Williams, Bradbury, See & McCaleb at Chicago, Illinois, of Counsel for Plaintiff-Appellee, in the suit of Splittorf Electrical Company vs. Webster Electric Company No. 2769 in United States Circuit Court of Appeals for the Seventh Circuit; that on March 7th, 1921, he delivered copies of the annexed notice and of the printed petition for rehearing and motion for oral argument on the petition referred to in said notice to a member of the firm of Rector, Hibben, Davis & Macauley at their offices in the McCormick Building, Chicago, Illinois, Mr. Rector being of Counsel for Defendant-Appellant.

J. DAVID DICKINSON.

Subscribed and sworn to before me at Chicago, Illinois
March 7th, 1921.

EDNA V. GUSTAFSON,
Notary Public.

(Seal)

(Endorsed) Filed March 8, 1921. Edward M. Holloway,
Clerk.

And afterwards on the same day, to wit, the seventh day of March, 1921, in the October term last aforesaid, there was filed in the office of the Clerk of this Court a certain petition for a rehearing, which said petition is in the following words and figures, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE SEVENTH CIRCUIT.

No. 2769.

SPLITDORF ELECTRICAL COMPANY,

Defendant-Appellant,

vs.

WEBSTER ELECTRIC COMPANY,

Plaintiff-Appellee.

APPELLEE'S PETITION AND ARGUMENT FOR REHEARING.

LIVINGSTON GIFFORD,

LYNN A. WILLIAMS,

ROBERT M. ZEE,

JEROME N. FRANK,

Counsel for Plaintiff-Appellee.

852

UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE SEVENTH CIRCUIT.

No. 2769.

SPLITDORF ELECTRICAL COMPANY,

Defendant-Appellant,

vs.

WEBSTER ELECTRIC COMPANY,

Plaintiff-Appellee.

APPELLEE'S PETITION AND ARGUMENT FOR REHEARING.

I.

Petition and Statement.

Plaintiff-appellee, Webster Electric Company, respectfully petitions the court for a rehearing in the above entitled cause, on the single question of the validity of claims 7 and 8 of the Kane patent No. 1,280,105.

While in form this is a petition for a "rehearing," it is not such in fact. The court has decided the question of patentable invention adversely to Kane solely upon what it calls an "immaterial" difference between Kane and Weber. The essence of the Kane invention

and the vital difference between Kane and Weber is nowhere alluded to in the court's opinion. We do not ask any reconsideration of the "immaterial" difference to which the opinion is limited. We do desire the court's consideration of the vital difference as to which the opinion is silent.

The opinion of the court, filed February 5, 1921, concludes that claims 7 and 8 of the Kane patent are "invalid for want of patentable novelty." This conclusion followed from the court's finding that—

"Certainly with the teachings of Weber (Patent No. 820,535) before us, the *prima facie* presumption of invention in Kane's contribution is overcome."

We respectfully submit that this conclusion and finding are based on the misconception that Kane's "unitary structure" consisted *merely* of a magneto-supporting bracket *integrally* united with the spark plug, as distinguished from Weber's magneto-supporting bracket *rigidly secured* to the spark plug. This view (and the court's opinion) wholly ignores the very essence of the Kane invention—Kane united **ALL OF** the operating mechanism of the equipment, in a single unitary structure secured to the engine by one single part. There is no intimation of this "unitary structure" in the Weber patent.

Kane's "unitary structure" is just as vitally different from Weber as it is from plaintiff's old Milton equipment. The Milton equipment was found wholly impractical by the International Harvester Company in 1909; the owners of the Weber patent found the Weber structure unusable and therefore manufactured the "unitary structure" of Kane; while the Kane structure is used on eighty per cent. of all single cylinder gas engines manufactured in this country.

The misconception on which we respectfully submit

the court's conclusion is based, is due, no doubt, to the fact that the original argument involved the consideration of a large number of complex questions, so that counsel were unable fully and properly to present to the court the facts concerning the single question in issue on this petition,—the meaning and validity of Kane's claims 7 and 8.

In the opinion the court asks if it was "patentable novelty to provide the means whereby the generator was supported by an arm running from the spark plug." In reaching a negative answer, the court said:

"The fact that the Weber patent fails to disclose a mounting element integral with the igniter block is not sufficient to distinguish the citation when it appears that Weber's two elements are rigidly secured together. In other words, it is quite immaterial whether the mounting of the generator upon the block is by a single piece which is integral with the block, or by two pieces securely fastened together."

On this petition we do not question that proposition. Our contention is that that proposition (to which the Court's opinion respecting the validity of Kane claims 7 and 8 is limited) is relatively immaterial.

Immediately following the above quotation, the court said:

"The essence of the (Kane) contribution was the *unitary structure* made possible by the rigidly and inseparably connected parts, the magneto generator, and the unitary block."

That is not in any sense the essence of the Kane invention! The union of the magneto and the spark plug (whether integrally as in Kane or rigidly as in Weber) is not the meaning of the term "unitary structure" as used throughout the record. Claim 8 of the Kane patent does not even purport to express a distinction between an integral, or one-piece supporting member, and

a non-integral or two-part supporting member, and claims 7 and 8 both rely for their patentable novelty upon a broad and important distinction which has nothing to do with the question whether a supporting element such as shown by Weber be of "integral" or of two-part construction.

The vital difference between Kane's "unitary structure" on the one hand, and the Weber patent and the old Milton equipment which Kane superseded on the other hand, is not referred to in the court's opinion. It is that vital difference which has caused the remarkable success of the Kane structure and the plaintiff company.

This petition, therefore, accepts the correctness of the court's opinion so far as it goes, but is directed wholly to a consideration of this vital difference between Kane and the prior art, to which the court's opinion makes no reference.

II.

Argument.

In the following argument, we shall endeavor—

First, to explain to the court the really vital difference, which its opinion does not consider, between Kane and Weber in construction, mode of operation and result, and,

Second, to call the attention of the court to what seems to us compelling evidence that this vital difference involved invention.

The Real and Important Distinction Between Kane and Weber.

Your Honors have apparently reached your expressed conclusion relative to claims 7 and 8 of the Kane patent upon the assumption that these claims would describe the Weber equipment if in Weber the horizontal generator supporting bracket 53 were made integral, and of a single piece, with the igniter block 3.*

The fact of the matter is that Weber would not meet either of these claims even if the generator bracket 53 were made integral with the igniter block 3. On the other hand, claim 8 of the Kane patent was purposely so drawn and worded that it would cover Kane's real invention even if the supporting member were made of two or more separate parts rigidly or otherwise secured together, as in Weber.

The court's opinion, in quoting claims 7 and 8, italicizes the following phrase in claim 8:

"A supporting member upon the several parts of which all of the aforesaid mechanism is mounted, and having a single integral part adapted to be attached to the engine,"

and said that these "words mark the asserted novelty upon which invention is predicated."

But this phrase does not even pretend to require that the supporting member shall be of a single piece of metal, or that it shall, in other words, be "integral." On the contrary, this phrase refers to the supporting member as having "*several* parts." These "*several* parts" may, within the very terms of the claim, be integral, or they may be entirely separate. One part may, for example, be of cast iron, and another part of steel, precisely as in Weber insofar as this feature alone is concerned.

* Weber's patent drawings reproduced on page 12 hereof.

The important thing is that "**ALL OF** the aforesaid mechanism" shall be mounted upon the single supporting member, regardless whether this supporting member be formed integrally or of several parts secured together, and that the supporting member, whether it be made of one piece or more than one piece, shall have but "*a single integral part adapted to be attached to the engine.*"

The essence of claim 8 is not at all, therefore, that the supporting member shall be of integral or one-piece formation, but that **ALL OF** certain "aforesaid mechanism" shall be mounted upon the one supporting member, and that this supporting member be attachable to the engine at a single place, and by a single part.

This Weber patent 820,535 was in the record, and before the Patent Office Examiner when this claim 8 was presented and allowed, and in the same paper in which the claim was presented the real and vital distinction between Kane and Weber was discussed in part as follows:

"At the oral interview above referred to we demonstrated to the Examiner the advantage of the Kane structure over that of the Weber patent No. 820,535 of the prior art, and we believe that the claims now presented distinguish clearly from the disclosure of the Weber patent and from all else in the prior art which had been cited or which has come to our attention. The claims now presented require that **ALL OF** the mechanism comprising the combination of elements stated in the claims shall be mounted upon the supporting member whereby the relative adjustments and synchronism may be maintained or insured no matter how often the ignition mechanism may be removed from and replaced upon the engine with which it is associated. In the Weber device there are *two supporting members adapted to be attached to different parts of the engine.* Upon one of these members the electrodes are mounted. Upon the other member the spring mechanism and push rod engaging mechanism are mounted. Weber's generator is in turn mounted upon still a third part

of the supporting arrangement, and this separate generator supporting shelf is in turn clipped under two of the bolt heads which hold the flange of the igniter plug to the engine cylinder. In Weber, therefore, it is impossible to remove the entire ignition equipment as a unit or without disassembling it, and any slight failure to return all of the supporting parts to their identically same positions and same relative positions is bound to alter the interadjustment and relationships between the essential functional parts of the ignition equipment, with consequent liability to destroy the necessary synchronism, let alone the inconvenience and labor involved in attempting to remove and replace the ignition equipment.

“The claims now presented are not descriptive of the Weber device. They do describe the features of Kane’s structure wherein Kane’s very important practical advantages over Weber inhere.” (Italics ours.)

We shall, in the following pages, explain in a little more detail this distinction between Kane and Weber which was thus presented to the Patent Office Examiner at the time when claims 7 and 8 were allowed.

The Milton Device Which Kane Superseded.

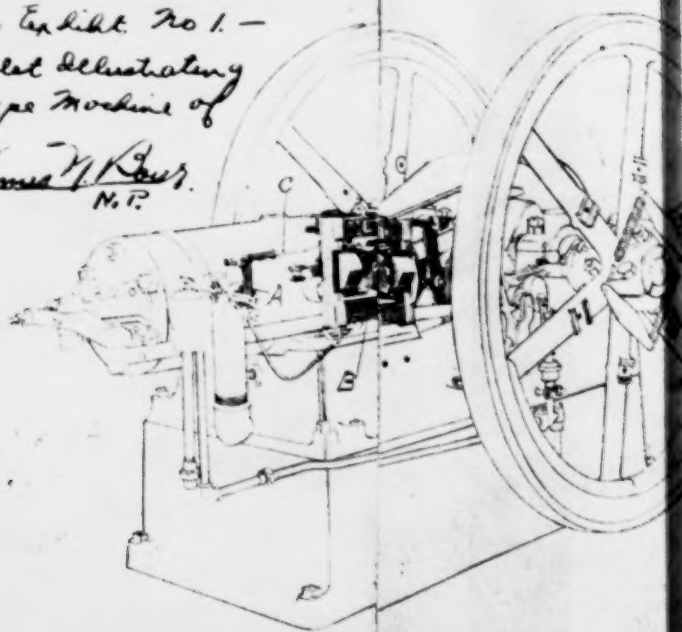
On page 9 we have reproduced from Plaintiff's Exhibit 13 (Exhibit Book, page 11) a cut of the Milton magneto as manufactured by the Webster Electric Company and sold by it to the International Harvester Company prior to Kane's invention of the unitary magneto ignition equipment of the patent in suit. This cut shows the igniter block with its fixed and movable electrodes mounted upon the engine cylinder at A. The generator B with its driving spring mechanism, is mounted upon a separate and distinct boss upon the side of the engine cylinder, while a connecting rod or link C communicates motion from the rotor of the generator B which is mounted at one place, to the movable electrode of the spark plug A, which is independently mounted at another place.

The spark plug A may be removed from the engine cylinder without removing the generator B and its associated mechanism. So also the generator and its driving spring mechanism may be detached without removing the igniter block A with its associated electrodes. Although both parts of the ignition mechanism may be removed from the engine, the very fact of removal destroys their co-operative relationship and makes it impossible to operate the equipment either in the manner in which it operates when the two parts are separately mounted upon the engine cylinder or in any other such manner as will cause the production of an ignition spark.

United States Patent Office
 In re Interference No. 39,913
 Milton versus Kane

Kane Exhibit No. 1. -
 Pamphlet Illustrating
 Link Type Machine of
 1909 -

James H. Kane.
 N.P.



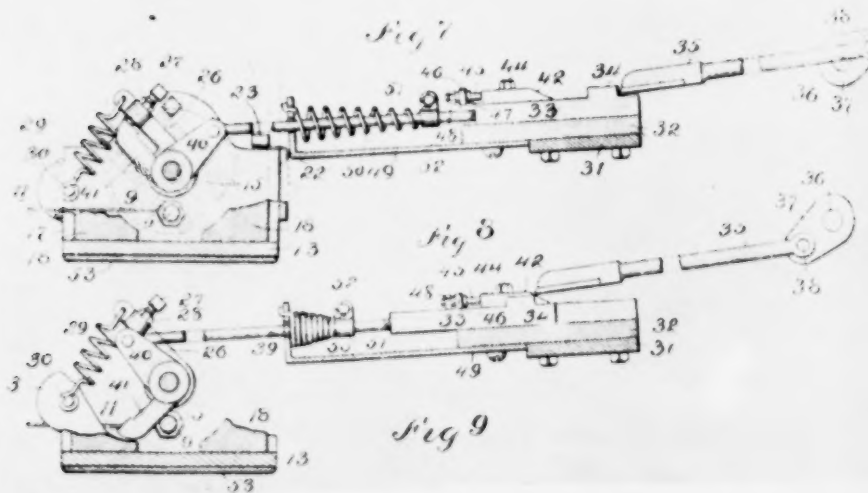
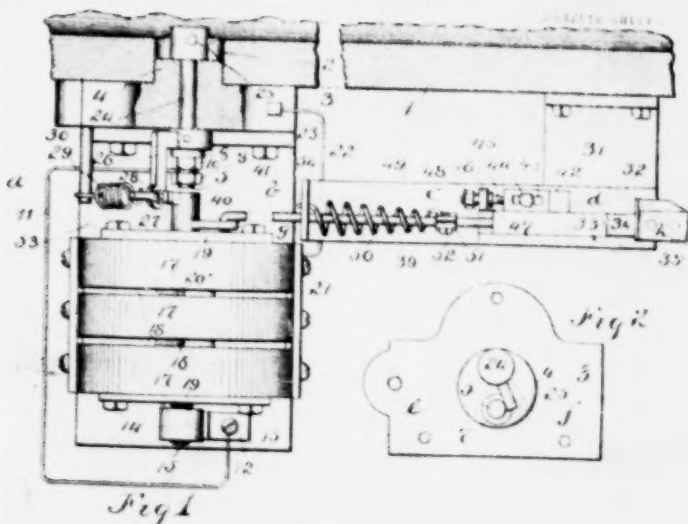
6-horse power I. H. C. engine equipped with magneto

Milton Two-Group Construction of Prior Art.

No. 820,535

PATENTED MAY 16, 1906.

G. J. WEBER.
ELECTRIC IGNITER FOR EXPLOSIVE ENGINES
APPLICATION FILED FEB. 10, 1905



The Weber Construction.

On page 12 we have reproduced the drawings of Weber patent 820,535. Your Honors have held that it is quite immaterial whether the mounting of the generator upon the igniter block 3 be by means of a bracket which is integral with that block or by the separate bracket 53 having an upturned flange 54, secured to the igniter block 3 by bolts or otherwise.

But your Honor's opinion is wholly silent as to the vital distinction between Weber and Kane which resides in the fact that the driving spring means 39, 50, etc., of Weber, is independently mounted upon "a horizontal bracket 31 to the right of the igniter block 39 as viewed in Fig. 1" (lines 34 to 38, page 2), this second supporting member 31 being secured to the side of the engine cylinder at a place quite distinct and wholly removed from the igniter block 3.

Claims 7 and 8 of the Kane patent specify that "**ALL OF** the aforesaid parts" shall be mounted upon a single supporting member. One of the essential and vital parts of the "aforesaid" mechanism in both claims is the "spring means tending normally to hold said rotor in a certain position." In Weber, the spring means 39, 50, etc., is not mounted upon the igniter block 3 or the generator bracket 53, 54; it is mounted upon the wholly separate and remote bracket 31.

In Weber, therefore, the generator and igniter block and electrode mechanism may be removed from the engine without removing the driving spring means 39, 50, etc.; on the other hand, the driving spring means 39, 49, 50, 31, etc., may be removed from the engine without removing the generator or igniter block 3. It is impossible with Weber, however, to remove **ALL OF** these essential

parts as a unit or without destroying their mechanical and electrical relationships. In Weber, as in the Milton magneto of the prior art, it is impossible upon removing either one or both groups of mechanism to cause them to co-operate or function as they do when attached to the engine and driven by the engine.

Weber and Milton Were Alike; Both Were Two-Group Constructions.

In the old Milton magneto (which on March 15th, 1909, was condemned by its sole purchaser, the International Harvester Company), the driving springs were permanently attached to the generator, but the generator with its driving springs was attached to the engine at one place while the igniter block was attached to the engine at a wholly different place. In Weber, the generator was secured to the igniter block and the igniter block was attached to the engine at one place, while the driving spring means was attached to the engine at a wholly different place. In Milton the generator was connected with the movable electrode arm by an intervening connecting rod or link C, as shown in the cut on page 9 (or 14 of Milton patent 1,053,107, Exhibit Book, page 848), while in Weber the driving spring means was connected with the generator by an intervening connecting rod or link 39.

Weber and Milton were alike therefore in that both required attachment to the engine at two separate and distinct places. In both of them, part of the equipment was associated with the igniter block and attached to the engine with the igniter block, while other parts of the equipment were mounted upon a second and independent bracket which was attached to a distant part of the engine.

In both Milton and Weber, any attempt to remove the

ignition equipment from the engine involved its disassembly—it involved a destruction of the co-operative relationship between its essential parts.

In neither Milton nor Weber was it possible to test or adjust or determine the functioning of the parts or of the whole when removed from the engine.

Milton and Weber were alike also in that both were mechanical and commercial failures.

Not only were Milton and Weber alike in being mechanical and commercial failures; the reason for their failure was essentially the same. In both Milton and Weber the necessarily co-operating mechanism of the ignition equipment was divided into two separate and distinct groups, these two groups being separately and independently mounted upon the engine cylinder in such manner that their functional relationship depended upon their attachment to the engine and in such manner also that the removal of either one or both groups of mechanism from the engine made it impossible to operate the whole or to insure its return to the engine with the necessary or any predetermined relationship between the parts.

The Essence of Kane's Invention.

The Kane invention, as specified in claims 7 and 8, and as originally produced by Kane, is shown in the cut on page 17, this cut having been reproduced from Plaintiff's Exhibit 16 (Exhibit Book, page 19). This shows clearly the igniter block A, in which the electrodes are mounted, and which is extended to form a single mounting means for **ALL OF** the "aforesaid" mechanism, including the generator B and the driving springs C, C, as enumerated in claims 7 and 8. When the bolts are removed from the holes *a, a*, the entire magneto ignition equipment may be detached from the engine as a unit. It is as completely operable when removed from the engine as when attached to the engine. Whatever may be the character and timing of the ignition spark when removed from the engine, precisely that character and timing are insured when the ignition unit is replaced upon the engine. As claim 8 explains, the construction is one "whereby all of said mechanism may be removed from the engine with unchanged relations between any and *all* of the parts of **ALL OF** said mechanism, thereby insuring the predetermined synchronism and inter-related adjustment of said mechanism when it is replaced upon the engine."

The importance of this one-group construction is due to the fact that the proper ignition of the explosive mixture in an internal combustion engine is absolutely essential to its operation, and that the ignition of the explosive charge is prevented whenever the spark electrodes become foul. There is an unpreventable deposit of carbon upon these electrodes and the block in which they are mounted. As explained by the experts, it is necessary not merely occasionally, but frequently, to clean the carbon deposit from the electrodes and exposed end

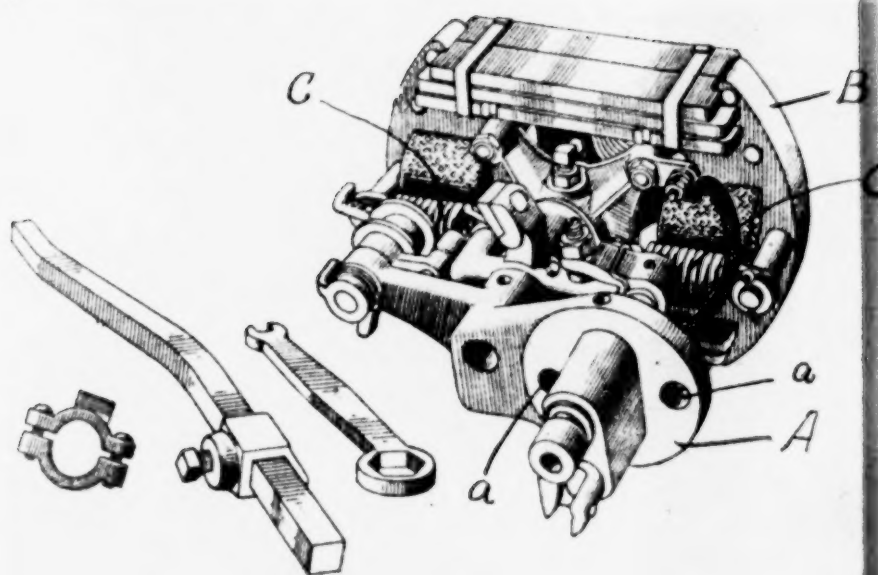


Illustration No. 6

Kane's Unitary Construction.

ALL OF the mechanism is mounted upon a single supporting member having a single attaching part A.

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of the igniter block. To do this, it is necessary to remove the igniter block with its electrodes from the engine cylinder.

With Kane's unitary or one-group equipment, the inexperienced operator of an engine can and does remove the entire equipment whenever the spark electrodes require cleaning. The carbon may be scraped or brushed from the electrodes and the igniter block in which they are mounted, and the entire ignition mechanism may be returned to its position upon the engine without changing or destroying for one instant the mechanical relationships between all of the parts, the accuracy of whose adjustment is essential to the operation of the ignition device.

In order to determine whether the cleaning of the electrodes has removed any particle of carbon which may have effected a fatal short circuit, the operator has merely to cock and release the rotor of the generator in order to observe whether the requisite "fat" spark is produced between the electrodes. If the spark is of the proper character, the magnetic equipment is replaced upon the engine with the certainty that it will produce identically the same spark when actuated by the push rod of the engine as when cocked and released in the hands of the operator.

If after cleaning the electrodes, the hand operation of the mechanism does not effect the production of a fat, hot spark between the electrodes, then the inexperienced user of the engine may change his adjustments one way and the other until the hottest, fattest possible spark is produced. By cocking and releasing the rotor of the generator, while holding the unitary and completely assembled equipment in his hands, he can see and determine by his eye alone when the best

adjustment is secured. If, on the contrary, the ignition equipment could be made to function only when assembled upon the engine, then it would be impossible to observe the character of the spark, because the electrodes in that case would be concealed within the cylinder of the engine. Under such circumstances, the character of the ignition spark could be determined only by the use of elaborate electrical measuring instruments, with which, of course, the ordinary user is not supplied; or by cranking the engine in an effort to make it run, followed by repeated removals and adjustments of the equipment. Long continued cranking of the engine which refuses to start, in order to test such repeated readjustments, is a task of exasperating difficulty. The fact that eighty per cent. of the single-cylinder stationary engines now manufactured and sold are equipped with the Kane unitary or one-group magneto ignition equipment is the best possible evidence that engine users appreciate the very great advantages of the construction described in claims 7 and 8 of the Kane patent.

The History of the Weber Patent in the Hands of Its Owners.

No amount of argument, no quantity of expert opinion, could establish the deficiencies of the Weber equipment so effectively as does the history of the Weber patent in the hands of its owners.

It is not shown that a single equipment like that of the Weber patent was ever manufactured or used by Weber or the concern with which he was associated. If ever it had been used by them, the defendant would have produced the proof to show the fact.

The defendant's proof is that Henry G. Cox went

with the Accurate Engineering Company of Chicago in 1914 to develop its business in magnetic ignition equipment (Record, pp. 719 and 716),—a line of business in which the Accurate Company had not theretofore been engaged.

“The Weber patent (No. 820,535) was bought in the summer of 1915 (by the Accurate Engineering Company) and then the machine shown on page 2 of the Plaintiff’s Exhibit No. 70 was made, and some time later than that the machine shown on the inserted page 2 of Plaintiff’s Exhibit 71 was made, and that machine was intended to take the place of that shown on page 2 of Plaintiff’s Exhibit 70” (Record, p. 719).

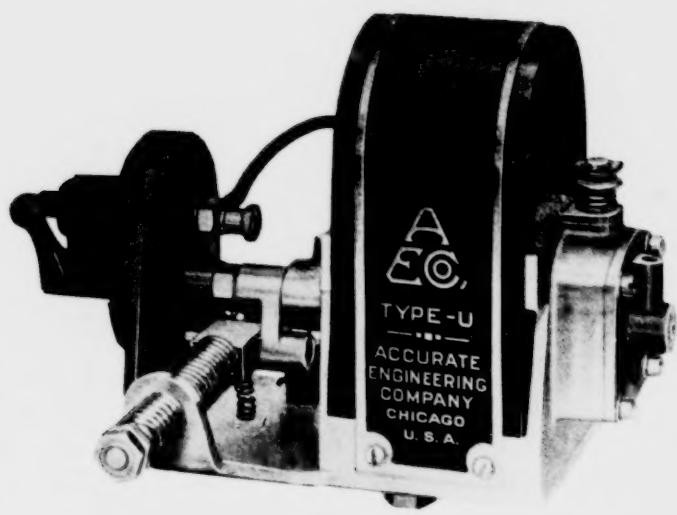
The photographs on pages 23 and 25 are reproduced from cuts (Plaintiff’s Exhibits 70 and 71) of the Accurate Engineering Company’s equipment as thus developed immediately after the company had bought the Weber patent.

In these machines thus manufactured by the Accurate Company, and ostensibly under the Weber patent, “the entire equipment” as testified to by Mr. Cox on cross-examination, “including magneto and operating springs, was mounted and carried as a part of the plug member” (Record, p. 719). The first of the photographs on page 23 shows clearly that the second and independent horizontal bracket 31 of the Weber patent has been entirely dispensed with, and that the main driving spring, while retaining merely the general form of that shown in the Weber patent, has been transferred to a position in association with the generator and with which it is mounted upon the single bracket member extending from the igniter block.

The Accurate Engineering Company was not hampered by any previous history in adopting any design that it might see fit. But after some experimentation, the very

first oscillating magneto equipment which it offered for sale (Record, page 717) did not conform at all with the non-unitary or two-group plan of the Weber patent. On the contrary the very first machine ever offered for sale by the owners of the Weber patent was the machine shown on page 23 and embodying the unitary or one-group idea which is the vital and distinguishing feature of the Kane invention. The result was that the first machine brought out by the Accurate Company "under the Weber patent" was one which could be removed from the engine as a unit and which, when removed, was completely operable in precisely the same manner as when attached to and driven by the engine. Like the Kane machine of the plaintiff with which the Accurate Company must compete upon entering the magneto-ignition field, its first equipment was one in which the spark electrodes could be removed from the engine cylinder for cleaning without destroying or disturbing, in the slightest degree, the inter-related parts involved in producing the spark and in which the entire equipment could be replaced upon the engine with the certainty that every element entering into the production of the ignition spark would function when on the engine in precisely the manner in which it functioned while in the hands of its owner.

So also in the later form of the Accurate Engineering Company's "unitary construction," as shown in the second of the two photographs (page 25) the spring driving means was mounted upon and carried by the generator bracket so that the machine was "of a unitary construction" adapted to be operated in precisely the same manner whether on the engine or removed from the engine. In this case, even the general form of the Weber driving spring means was abandoned and the dual driving spring arrangement of Kane was adopted. In this second equipment thus gotten out by the owners of the



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Weber patent, the second and independent bracket 31 was entirely dispensed with and **ALL OF** the co-operating mechanism of the entire ignition device was mounted upon the several parts of a single supporting member having but a single integral part, *i. e.*, the igniter block at the extreme right-hand end of the photograph, adapted to be attached to the engine. The construction was one whereby, to use the language of claim 8, "**ALL OF** said mechanism may be removed from the engine by removing said single integral part and may be returned to its position upon the engine with unchanged relations between any and all of the parts of all of said mechanism, thereby insuring the predetermined synchronism and inter-related adjustment of said mechanism when it is replaced upon the engine."

It is clear that the Accurate Company was intent upon following the Weber patent insofar as it was possible to do because, as Mr. Cox explains, the company was at great pains to make the plug and shelf member in two parts, rather than integrally. Thus Mr. Cox says (Record, page 717):

"The construction shown on page 2 of the catalog, Exhibit No. 70, is one in which there is a plug which extends into the engine cylinder; the plug has a flange; then there is a shelf member having a horizontal part, on which the magneto is mounted, and a vertical flange which runs up along side the flange of the plug; then there are bolts or studs, two of them, at diametrically opposite sides of the plug member and extending through the flange of the plug and the vertical flange of the shelf member; and those bolts when tightened up, would hold the vertical flange of the shelf to the plug and thus hold the parts together, while they were in operation on the engine.

"The part of it going into the engine was of cast

iron, and the shelf was of steel, and the two were riveted together."

All of this had to do, however, with the igniter block and generator bracket as to which your Honors have said that—

"It is quite immaterial whether the mounting of the generator upon the block is by a single piece which is integral with the block, or by two pieces securely fastened together."

But in the material and important matter, *i. e.*, whether "**ALL OF** the aforesaid mechanism is mounted" upon a single supporting member "having a single integral part adapted to be attached to the engine," The Accurate Engineering Company, having bought the Weber patent, found it a mechanical and commercial necessity to abandon Weber and adopt Kane.

At the time he testified, Mr. Cox "was the magneto superintendent for the International Harvester Company" (Rec., p. 713). He testified that the "Harvester Company took over the magneto ignition business of the Accurate Engineering Company and acquired the Weber patent" in April, 1917 (Rec., p. 719). The International Harvester Company was apparently unwilling to infringe the Kane patent, and therefore never manufactured either of the unitary magneto ignition equipments manufactured previously by the Accurate Company, and this notwithstanding the fact that it took over the Accurate Company's designs, tools, dies and equipment for manufacturing these machines. Nor did the Harvester Company manufacture any other form of ignition equipment embodying the Kane idea. On the contrary, as shown by the testimony of A. C. Kleckner (Rec., p. 792), the International Harvester Company, after its acquisition of the Accurate Company, continued to purchase thousands of the Kane unitary equipments annually

from the plaintiff, Webster Electric Company. The Harvester Company, like the previous owners of the Weber patent, is not shown ever to have made or used a single equipment constructed on the two-group plan of Weber.

The Compelling Evidence That Kane's Combination Did Involve Invention.

The courts have inevitably recognized the difficulty long after the event of answering the question whether a novel combination involves invention over the apparently almost completed attempts of the prior art. It is because of this difficulty that there are almost innumerable authorities for deciding such questions if possible upon the history of the invention in its relation to the art. We cannot recall any improvement patent whose history is more sharply indicative that invention rather than the mere skill of the art was involved in its creation.

The Long-Felt Want.

First, there is the agreement of the witnesses for the defendant with the witnesses for the plaintiff that there was prior to the Kane invention a long-felt and unsatisfied demand for something which would solve the problem of electric ignition for stationary internal combustion engines.

T. K. Webster, testifying on behalf of the plaintiff, said:

“Well, the whole magneto business was in a flux at that time (prior to 1909); they were using batteries, and yet they wanted magnetos; and it was a progressing upwards; everybody was trying to build something better, and we kept at it, and the only reason why we got the business of the Harvester for a time was it (the old Milton magneto) was probably the best machine on the market at the time.” (Rec., p. 342.)

Milton, testifying on behalf of the defendants, says:

"At that time (prior to 1909), I do not recall of anybody using magnetos of this type (rotary or oscillating alternating current magneto generators as distinguished from small direct current dynamos) on any stationary engines in this country. . . .

"Q. Were batteries used at that time quite generally?

"A. Almost universally. . . . They were a source of a great deal of trouble. . . . We found all the engine manufacturers very much interested in getting an electrical, an electric generator or magneto that would do away with battery troubles. So the developing progressed." (Record, p. 510.)

The First Engine Manufacturer to Adopt the Kane Equipment Had Previously Tried to Solve the Problem Itself.

The International Harvester Company, which had been practically the sole customer of the Webster Electric Company for its old Milton magneto of the two-group type had prior to the advent of the Kane invention become so thoroughly dissatisfied with the Milton device that the superintendent of its engine plant had called upon his engineers to attack and if possible solve the problem of satisfactory magneto ignition for their engines. This superintendent, Mr. H. A. Waterman, testified:

"Witness had never seen an equipment like plaintiff's Exhibit No. 12 (the Kane unitary equipment) until it was brought to Milwaukee by the Kanes, nor heard any discussion of that form of equipment with the integral plug and bracket support prior to that time. Witness said: 'No. I remember that well, because I had my boys get together and we discussed the possibility of making something satis-

factory if the Webster people couldn't furnish it, and when this (the Kane equipment) was presented, I said this would be satisfactory and we wouldn't attempt any further work of that kind.' " (Record, p. 235.)

The Webster Company's Long-Continued and Desperate Efforts to Solve the Problem Prior to Kane's Invention.

The Webster Electric Company or its predecessors under the same leadership of T. K. Webster, the president of the plaintiff company, embarked in an effort to solve the problem of magneto ignition for stationary internal combustion engines in 1905. It met with every conceivable discouragement, and loss, in its continued attempts to make something of the inventions of Curtin, McInnerney and Milton, with the net result that in March, 1909, it was selling a few magnetos to but a single customer, the International Harvester Company, and that company on March 15, 1909, had, by the superintendent of its engine plant, condemned the Webster Company's sole product as worthless and unusable. In other words, four years of time and effort and expenditure of money stood as a total loss to the Webster Company just prior to Kane's invention on April 11, 1909. And this was not because the Webster Company's magneto was inferior to the magnetos of other manufacturers. It was because no one had satisfactorily solved the problem of magneto ignition for stationary engines. No other manufacturer was to any noticeable extent making or selling magnetos for that service. The Webster Company's magneto, faulty and condemned as it was, was the best that the market afforded. (Webster Rec., p. 342.)

The whole record is full of the story of the struggle of the Webster Company and the Harvester Company

previous testimony had changed his opinion, that of all of the single-cylinder stationary internal combustion engines now manufactured and sold in this country, approximately eighty per cent. are equipped with the unitary magneto igniter equipment, such as is involved in this suit." (Rec., p. 792.)

There is not one word of evidence that the constructions of Weber or Wattles or Hennig have ever gone into commercial use in a single instance, either in the exact form shown in these prior patents or in any form embodying their substance. The evidence is that Wattles experimented for months in an effort to make a sale to the Harvester Company, but without success. (Rec., p. 293.) The evidence is that when the owners of the Weber patent went into the magneto business, they abandoned Weber's two-group arrangement and copied the unitary construction of Kane. (Rec., pp. 715-719.) The Hennig scheme apparently died with the birth of his patent.

The Defendant's Predecessors, Sumter Electrical Company, Having Attempted to Sell a Non-Unitary Oscillating Magneto Equipment Prior to Kane's Invention in 1909, Was Forced by Kane's Success First to Abandon and Denounce All Oscillating Magneto Equipment, Including Particularly Kane, and Then to Copy and Adopt the Kane Idea.

In about 1907, the Sumter Electrical Company at Charlestown, South Carolina, commenced to manufacture magnetos and as shown by the successive catalogues of this company in evidence, it was in 1910 and 1911 manufacturing and advertising an oscillating magneto of the "two-group" type not unlike the old Milton magneto of the Webster Electric Company. This two-group

magneto of the Sumter Company was found not to be salable in competition with Kane's unitary or one-group magneto, which had been put on the market by the Webster Company.

The inability of the Sumter Company to sell their two-group oscillating magneto in competition with the Webster Electric Company's unitary machine had become so pronounced that in the 1913 issue of their catalogue, the Sumter Company said (Rec., p. 406):

"We furnish a full line of this type (oscillating magnetos) formerly so popular, but wish to state that owing to the high efficiency of our standard rotary type and the fact that we can meet every requirement with the rotary machine, oscillators are not so desirable, as they have certain inherent disadvantages not possessed by rotary machines.

"We will be pleased to correspond with manufacturers now using oscillators who desire to change to the more simple and efficient rotary type. . . . We do not recommend oscillators, and while we furnish a machine of this type equal, if not superior, to anything on the market, we do not recommend same."

This advertising condemnation of the oscillating magneto was continued by the Sumter Company into 1914, as evidenced by Plaintiff's Exhibit No. 28, Sumter Booklet, issued in February 1914 (Rec., p. 407). During 1914 and 1915 the success of the Webster Company's Kane machine had become assured. The Webster Company's sales had jumped to 46,444 machines in a single year.

The Sumter Company was forced by this success of the Webster Company to drop its disparagement of oscillating magnetos and in 1915 commenced the manufacture of a unitary or one-group equipment substantially in duplication of the Kane equipment as manufactured by the Webster Company beginning in 1909. The Sumter Company's entire policy was changed, and its adver-

tising matter lauded and vigorously pushed the one-group oscillating machine which it had copied from the plaintiff (Rec., pp. 418, 410; Plaintiff's Exhibits 40 and 41).

The Sumter Company was at that time controlled by the Splitdorf Company and the two were consolidated in 1915 (Rec., pp. 486, 487, 491, 492). It is the machines thus brought out by the Sumter Company in 1915 and subsequently manufactured and sold with some variations in detail by the Splitdorf Company which infringe and are conceded to infringe claims 7 and 8 of the Kane patent in suit.

We have, then, a situation in which the effect of the Kane invention upon the defendant's business was first to drive off the market the old two-group oscillating magneto of the defendant, then to incite the defendant to disparage and denounce all oscillating magnetos, including particularly the Webster Company's Kane machine, and finally to exploit an oscillating magneto which incorporated the unitary one-group principle—the vital essence of the Kane invention.

The Webster Company's Sales of Kane's Unitary Magneto Ignition Equipment.

We have shown that the Webster Company's ability to sell any of the old Milton two-group magnetos had ended on March 15, 1909.

Its first order for a unitary magneto embodying the Kane invention immediately followed Mr. Waterman's letter of June 11, 1909 (Exhibit Book, page 4). Mr. Loeb, the secretary of the Webster Company, testified that by 1912 the sales of the Kane machine were at the rate of about 9,000 per year. By 1915 the sales had jumped to more than 46,000. In the succeeding year the sales practically doubled. In 1917, 106,773 of these machines were

sold; and in 1918 the sales of this one-group unitary machine were 129,785 (Rec., p. 474). In 1919 the evidence shows that eighty per cent. of all of the single-cylinder stationary engines manufactured in this country were being equipped with magneto igniters embodying the Kane idea of mounting **ALL OF** the inter-related and co-operating mechanism as a group upon a single supporting member attachable to the engine at one place, and one place only (Rec., p. 793).

Conclusion.

We have referred to the record and stated our views at greater length than is usual in petitions for rehearing. But the situation itself is unusual. We are not asking the court to reconsider any question which it has decided. We do ask it to consider and decide the vital question in the case, to which its opinion makes no allusion whatever.

The original submission of the case to this court involved the argument and consideration of complicated questions of interpretation of contracts,—of priority of invention between Kane and Milton,—of the Kane-Milton and the Kane-Podlesak interferences,—of infringement,—and of invention in the Kane structure as compared with the prior art. Although our original brief contained 145 pages and our reply brief 39 pages, we were able to devote only 8 pages in our main brief and 2 pages in our reply brief to the consideration of Kane's invention as compared with the prior art, without extending those briefs beyond all reasonable limits. A similar situation prevailed at the oral argument.

As a consequence of the necessarily incomplete and unsatisfactory presentation of the facts and argument as to the essence of Kane's invention and its vital dif-

ferences from the prior art, the court has based its decision of this question of invention on a relatively unimportant difference between Kane and the prior art, without making any allusion to the vital difference between Kane and the prior art, and apparently without an appreciation of what the Kane invention really is.

The considerable length of this petition is accounted for by our desire to show to the court quite fully at this time that there is much proof in the record of a vital and inventive difference between Kane's "unitary structure" and everything that preceded it, and that the court's opinion has stopped short of a consideration of this proof and of an appreciation of the essence of the Kane invention. There is, however, much more proof to be examined and argument to be presented, than can be submitted within the limits even of this extended petition. We respectfully submit that further argument of the case should be permitted in order that this essential question of invention in the Kane structure, as to which the court's opinion is silent, may be considered and decided.

Respectfully,

LIVINGSTON GIFFORD,

LYNN A. WILLIAMS,

ROBERT M. SEE,

JEROME N. FRANK,

Counsel for Plaintiff-Appellee.

Certificate of Counsel.

We hereby certify that in our judgment the foregoing petition for rehearing is well founded, and has not been filed for delay.

Chicago, March 7, 1921.

And afterwards, to wit: On the twenty-fifth day of March, 1921, in the October term last aforesaid, there was filed in the office of the Clerk of this Court a certain answer to plaintiff-appellee's petition for a rehearing, which is in the following words and figures, to wit:

IN THE UNITED STATES CIRCUIT COURT OF APPEALS,

For the Seventh Circuit.

October Term, A. D. 1920.

No. 2769.

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|-------------------------------|---|
| Splitdorf Electrical Company, | } |
| <i>Defendant-Appellant,</i> | |
| <i>vs.</i> | |
| Webster Electric Company, | |
| <i>Plaintiff-Appellee.</i> | } |

ANSWER TO PLAINTIFF-APPELLEE'S PETITION
FOR REHEARING.

A careful reconsideration of the opinion of the court, in connection with the petition for a rehearing and the brief in support of the same, has not led to the discovery that the court made any mistake of fact or conclusion in respect to the subject matter of the petition for rehearing. On the contrary, the opinion shows, we think, that the court had a perfectly clear apprehension of the subject matter of claims 7 and 8 of the Kane patent in suit, and of the relation of the disclosures of the prior art to that subject matter, and reached a correct conclusion respecting them.

The burden of plaintiff's entire argument seems to be that the court overlooked or did not give sufficient weight to the fact that claims 7 and 8 specify that "all of" the previously enumerated elements of each of the claims, one of which elements is the spring for actuating the armature (*i. e.*, for returning it to initial position after being displaced therefrom and released) are mounted upon a single supporting member carried by the igniter plug, whereas in the construction disclosed in the Weber patent of the prior art the

spring is mounted upon and carried by an independent support.

That the court did not overlook this difference between Kane and Weber is sufficiently evidenced, we think, by the fact that it is perfectly plain and apparent upon the face of the drawings of the Weber patent, as well as being clearly described in the specification, and by the fact that the difference was repeatedly referred to and discussed in defendant-appellant's brief. Thus, the very first reference to the Weber patent in that brief (page 73) was as follows:

"Weber Patent No. 820,535. This patent discloses an oscillating magneto of the same general character as that of the Kane patent in suit, and designed for the same use and in the same way as the Kane construction; and all of the parts which are, in the Kane construction, mounted upon and carried by the igniter plug, are likewise mounted upon and carried by the igniter plug in the Weber construction, with the single exception of the spring which operates to return the oscillating armature to normal position after it has been displaced therefrom and released."

Again, on page 78, the difference between Kane and Weber in this respect was referred to as follows:

"The two criticisms of the Weber disclosure offered by plaintiff's counsel and expert in their effort to distinguish it from that of the Kane patent, are, first, that it is not clear, from the specification and drawings of the Weber patent, how the vertical flange 54 of the horizontal shelf or bracket 53 is 'secured rigidly to the igniter block 3,' and, second, that the spring 50 for returning the armature to initial position after it has been moved therefrom and released by the plunger rod 35 is not mounted upon and carried by the shelf or bracket which carries the magneto generator, as is the case in the Kane construction."

The subject is again referred to and discussed on pages 82, 83 and 84, so that there can be no question, we think, that the true facts were clearly before the court at the time it reached its conclusion and prepared its opinion.

Moreover, as shown by the record and pointed out in our former brief, the fact that the spring is in one case mounted directly upon the support which carries the magneto, and in the other upon an independent support, has nothing whatever to do with the "preservation of synchronism" between

the co-operating parts, which, according to the argument of plaintiff's counsel, constituted the primary object and advantage of Kane's alleged invention.

There are two things to synchronize. The first and important one is to separate the electrodes just at the right point in the return movement of the armature, so that the spark will be produced when the current generated by the movement of the armature reaches the maximum. The second and less important is to produce the spark at the right point in the stroke of the piston in the engine. This is determined by the time when the armature is tripped, so that the springs may return the same to normal position.

With respect to the first of these, the Weber construction makes exactly the same provision for "preserving synchronism" that the Kane construction does, not only clearly disclosing it in the drawings of the patent, but specifically referring to it in the portion of the specification which the court quotes on page 8 of its opinion and which reads as follows:

"In order that the crank arm and the hammer arm may hold their relative positions with respect to each other intact, I prefer to mount the plate or board upon a horizontal bracket, the inner end of which is provided with a vertical flange secured rigidly to the igniter-block."

This subject is discussed at length at pages 78-81 of our former brief, and the opinion of the court clearly shows that there was no misapprehension whatever respecting it. (See also Rec., 695, 696.)

With respect to the second of the two provisions for "preserving synchronism," there is similar provision (or lack of it) in both Kane and Weber. That is to say, there is no more or better provision in Kane for preserving a definite and fixed relation between the parts which operate to turn the armature of the magneto from normal position, against the resistance of its spring, and then trip and release it, than there is in Weber. In each of them the tripping device is a part of the engine and remains permanently connected to and mounted upon the engine when the igniter plug and magneto are removed. Thus, in Kane the armature is retracted or turned from its normal position, against the resistance of its springs, by means of the push rod 36 whose left-hand free end engages the trip arm 35 secured to and projecting from the armature shaft 16, and whose opposite end (not

shown in the drawings of the Kane patent) is permanently connected with the engine and operated by a cam or eccentric thereof, as shown in Fig. 1 of the drawings of Kane's Patent No. 1,204,573 (Rec., 914) which issued upon the original application which formed the basis of the divisional application upon which the Kane patent in suit issued.

When the igniter plug and magneto are removed from the engine in the Kane construction this push rod remains upon the engine, and the relation between its operating free end and the trip arm 35 of the magneto is of course temporarily destroyed. If the magneto is replaced upon the engine in exactly the same position which it previously occupied the relation between these parts for tripping the armature will be restored, but if there is the slightest difference in the replaced position of the magneto from that which it occupied before the relation of such parts will be modified.

The push rod 36 carries an adjustable cam piece 62 which rests upon and rides upon a roller 38, by adjusting which lengthwise of the push rod the exact point of release of the armature can be adjusted and varied as may be necessary.

Substantially the same provisions for retracting the armature and tripping and releasing it are found in the Weber patent; that is to say, the rod 39 whose left-hand end is connected to the arm 40 projecting from the armature shaft has its right-hand end screwed into and secured to a sliding block 33 mounted in a guideway upon a supporting plat or shelf carried by the bracket 31 bolted to the cylinder wall of the engine. This sliding block 33 is provided upon its upper face, near its right-hand end, with a lug 34 which presents a shoulder engaged by the free end of the push rod 35 whose opposite end is connected with the crank 37 upon the engine shaft. When the push rod 35 is reciprocated to the left, carrying the sliding block 33 with it and turning the armature from normal position against the resistance of its spring, (as shown in Fig. 9 of the Weber patent,) the widened free end of the push rod rides up over an inclined or cam surface 42 upon an adjustable block secured in relatively fixed position beside the slide 33, and at the proper point is thereby disengaged from the shoulder of the lug 34 and releases the parts, whereupon the spring restores them to normal position and forces the hammer arm 41 (Fig. 7) to strike the end of the adjustable screw 47 carried by the arm 26 of the movable electrode, to momentarily separate the electrodes and produce the spark. The cam piece 42 can be adjusted

to vary the time of release of the armature as may be desired.

This co-operation of the push rod 35 with the slide 33 connected with the armature, and with the disengaging cam 42, and the co-operation of the hammer arm 41 with the adjustable screw carried by the arm 26 of the movable electrode, are each and all substantially identical with those of the corresponding parts in the Kane construction. Indeed, if there be any difference between the two constructions with respect to "preservation of synchronism" or relation of parts between the push rod and the parts with which it co-operates to retract and release the armature, it would seem to be in favor of the Weber construction, since in the latter, when the igniter block and magneto are removed, not only the push rod but the parts with which it co-operates to actuate and release the armature are left intact upon the engine and their relation to each other, as previously adjusted, is not in any manner disturbed or affected by the removal and replacement of the igniter plug and magneto. When the igniter plug is unbolted from the engine and the plug and magneto removed the arm 40 projecting from the magneto armature, which has been previously engaged with the angularly bent end of the rod 40, simply slips out of engagement therewith, leaving the rod and all of its associated parts in fixed relation to each other on the engine, and when the igniter block and magneto are restored the arm 40 is simply re-engaged with end of the rod 39, and the parts necessarily bear the same relation to each other as they did before the removal of the igniter block and magneto; whereas, in the case of the Kane construction, if the igniter block and magneto are not restored to exactly the same position they occupied before—if, for instance, the magneto be tilted in the slightest degree axially of the armature shaft—the relation of the trip arm 35 to the end of the push rod 36 will be varied and require readjustment of the cam 62 on the push rod. This was in fact one of the defects in the Kane construction, which was remedied by the later invention of one of the Podlesak patents. (See lines 38-84 of Podlesak Reissue No. 13,878, Rec., 907, and claims 1 to 12, inclusive; also testimony of plaintiff's expert Webster, Rec., 452, 453.)

As will be clear from the foregoing, we think, so far as concerns Kane's provision for preserving intact the relations of the parts which cause a momentary separation of the electrodes at the right point in the return stroke of the ar-

mature to cause the spark to be produced when the current generated by the movement of the armature has reached its maximum, Weber's provision for such purpose is substantially identical with that of Kane, such identity extending even to the form and relation of the parts (compare the arm 27 carried by the movable electrode and provided with the adjustable screw 29 co-operating with the arm 30 on the armature shaft, of Kane, with the arm 26 carried by the movable electrode having the adjustable screw 27 co-operating with the arm 41 on the armature shaft, of Weber), while with respect to Kane's provision for preserving the relation or synchronism of the parts which are involved in the actuation and release of the armature, so as to produce the spark at the right point in the stroke of the engine, Weber likewise discloses means substantially identical with, if not somewhat better than, Kane's.

As must be apparent, therefore, the Weber and Kane disclosures are, with respect to the provisions for preserving the relation or "synchronism" of the parts concerned in producing the spark of maximum size or intensity, and of producing such spark at the right time in the stroke of the engine, substantially identical, and the fact that the armature-actuating spring is removable with the igniter block and magneto in the one case, and remains upon the engine when the block and magneto are removed in the other, is of no moment whatever. The only difference between the two disclosures or structures, due to the fact that the spring is removable with the magneto in the one case and not in the other, consists in the fact that when the spring is removed with the magneto it remains connected and associated with it after the magneto has been removed, so that if provision were made for retracting the armature of the magneto, against the resistance of its springs, and releasing it, while the magneto was detached from the engine, a spark might perhaps be somewhat more readily produced than if the armature were oscillated in both directions by hand, instead of being moved in one direction by hand and in the other by a spring. But the Kane patent discloses no provision whatever for retracting the armature, against the resistance of its springs, when the magneto is detached from the engine, and neither Kane nor plaintiff ever contemplated anything of the kind until after the invention of the very ingenious and unique provision made for the purpose by the Podlesaks, and disclosed in and covered by their patent, No. 1,101,956.

(Rec., 453-455; Ex. Bk., 899.) Prior to this invention of the Podlesaks the Kane magnetos, as manufactured and sold by plaintiff, were tested for spark in the manner described in plaintiff's circular (Rec., 21), under the heading, "To Test for Spark." It was quite impracticable to retract the armature, against the resistance of its springs, with one's fingers or hands, when the magneto was detached from the engine, and it was not practicable to do it in any definite and useful way with any mechanical device prior to the Podlesaks' invention. The court may recall the attempted demonstration to the contrary which plaintiff's counsel made at the oral argument with a screw driver, and the fact which was then apparent that the armature could not be retracted to and released at any definite point by any such means, so that the idealized "testing for spark" referred to in plaintiff's present petition and brief is something not only never contemplated by Kane or plaintiff, prior to the Podlesak invention referred to, but was wholly impossible of accomplishment.

As demonstrated in the course of the trial below, and shown by the record (pp. 695, 696), a spark can be produced, with either the Kane or Weber magneto, with the armature springs disconnected or entirely removed, the armature being oscillated back and forth by hand; and in the absence of some provision such as that invented by the Podlesaks, such hand operation was just as practicable a method of testing the magneto for spark as was anything that was possible with the Kane magneto.

Moreover, and in and of itself a sufficient answer to plaintiff's argument on this point, there is no pretense or claim (and if there were it could not be sustained) that Kane made any invention in the magneto itself which is in any way concerned with the matters which we have been discussing. He did not invent or design a magneto of the "self-contained" type, in which the armature springs were of the character of those employed by him and connected to the magneto in the same way. Milton's earlier magneto was of that exact type, as shown, for instance, in his patent, 1,053,107, of February 11, 1913 (applied for January 10, 1909), and it was still earlier than Milton, as shown, for example, in the Hennig patent. (See Fig. 2, Rec., 790.)

As clearly shown by the record, the principal difficulty which the International Harvester Company had with the Milton magneto was not in the magneto itself, but in the *mounting* of it upon the engine. They attempted to mount

it upon a small and insecure "boss" which was present upon the exterior of the cylinder wall, having been provided for another purpose (see Exhibit Book, p. 741), and as testified to by all of the witnesses for plaintiff, this mounting was found to be insecure and unsatisfactory. (Rec., 241-243, 364, 365.) What Kane did was not to make any substantial change in the Milton magneto itself, but simply to mount it upon the igniter plug instead of leaving it upon the frail and insecure "boss" where it had been previously located. Compare, on this point, the old Milton magneto, mounted in its old location, as shown on page 13 of the Exhibit Book, and the same magneto mounted upon the igniter block, and embodying Kane's alleged invention, as shown on page 15 of the Exhibit Book. As will be at once apparent, from a comparison of these two constructions—one equipped with Milton's magneto, the other equipped with Kane's magneto—the two magnetos were substantially identical, and Kane's alleged invention consisted simply in transferring the Milton magneto from its old mounting on the boss to its new mounting on the igniter block.

Manifestly, the *inventions*, if any, made by Weber and by Kane, in this respect, were absolutely identical, and consisted simply and solely in taking an old form of magneto and mounting it upon the igniter plug of an engine.

There was no novelty, at the date of Kane's alleged invention, in mounting the magneto of a gas engine upon the igniter plug of the engine, whether the magneto in question was of one old type or another—whether it was of the type disclosed in the Weber patent, in which the armature spring was disconnected from the magneto and remained on the engine when the magneto was removed or whether the magneto was of the "self-contained" type of Milton, which Kane used, and others which he might have used. The Wattles Patent No. 909,264 (Rec., 778-782) discloses a self-contained type of magneto mounted upon the spark plug of an engine—a disclosure in which "all of" the operating parts of the magneto are mounted upon and supported by the igniter block—so that there was no novelty whatever, at the date of Kane's invention, in mounting one type or another of old magneto upon the spark plug or igniter block of an engine. Weber had disclosed such mounting of one old type of magneto. Wattles had disclosed another. Kane simply took another slightly different type—the old Milton magneto—and transferred it from one loca-

tion on the engine to another, mounting it upon the spark plug or igniter block, just as Weber and Wattles had done with their magnetos. (Rec., 697.) That was all he did, so far as the claims in question are concerned, and the court was manifestly right in holding that it was not an invention at all.

Indeed, Kane himself never claimed to have made any invention in the mere mounting of the magneto upon the igniter block, but, on the contrary, testified (Rec., 277, 278, 281) that he did not consider it an invention at all, but a mere matter of design, and told his patent solicitor that the invention he desired to patent was his "automatic cut-off," to which the specification and claims of his application, as originally filed, were directed. It remained for the plaintiff after it acquired the Kane application, to introduce into it for the first time claims to the wonderful invention of mounting the old Milton magneto upon the spark plug instead of on the boss which had before carried it, and which Kane testified he did not consider an invention at all; and it did this (Exhibit Book, p. 687) more than eight years after the filing of Kane's application, and nearly nine years after the alleged invention had been in public use and on sale in this country and disclosed in Milton's British patent—indeed, *nearly three years after the present suit was brought.*

It would not seem that any further answer to plaintiff's petition could be necessary or desired, and yet there are a number of statements in the brief that may prove misleading if not briefly replied to. We especially call the attention of the court to the eight pages (pp. 22-29) which have been devoted to an effort to show that the Weber patent was a failure in the hands of its owner,—that the Accurate Engineering Company, which owned it at one time, adopted and manufactured the so-called unitary construction of Kane, and that the International Harvester Company, which succeeded to the business of the Accurate Engineering Company and to the ownership of the Weber patent, continued to employ almost exclusively plaintiff's unitary construction of the Kane patent. A reading of the testimony of Mr. Henry P. Cox, magneto superintendent for the International Harvester Company (Rec., 713-720), will show that plaintiff has not fairly stated or represented the facts, but on the contrary has sought to give the court an entirely false impression of them.

In the first place, plaintiff has introduced at pages 23 and

25 of its brief two cuts of what it represents to the court to have been the types of magneto manufactured by the Accurate Engineering Company, and points out that both are of the self-contained type, in which the armature-actuating spring is carried by the magneto, as distinguished from the type disclosed in the Weber patent. Now, the testimony of Mr. Cox shows (Rec., 717-719) that these cuts do not represent the commercial type of magnetos generally manufactured by the Accurate Engineering Company at all. On the contrary, Mr. Cox testifies that the company never manufactured any magnetos like that shown on page 23, except in an experimental way (Rec., 717), and never manufactured any like that shown on page 25 except upon a single order for Montgomery Ward & Company. (Rec., 719.) His testimony shows (Rec., 715) that the magneto which the Accurate Engineering Company largely manufactured for its customers in general, and which was very extensively used, and which the International Harvester Company continued to manufacture and use very extensively after acquiring the business of the Accurate Engineering Company, was one which plaintiff does not mention at all, to wit: the magneto shown in Defendant's Exhibit No. 51, reproduced at page 745 of the Exhibit Book. As the court will see from the illustrations of it there found, and from the description of it given by Mr. Cox on page 713 of the record, it is what plaintiff terms the "two-unit" construction of the old Milton magneto. That is to say, the magneto is independently supported upon the engine, at some distance from the spark plug or igniter block, and its armature is connected with the movable electrode by means of a rod passing through an eye or opening in the arm carried by such electrode and provided with an enlarged end or head, very much as disclosed in the Milton patent on page 848 of the Exhibit Book. That this so-called "two-unit" construction was entirely practicable, and highly satisfactory and successful commercially, fully appears from the testimony of Mr. Cox at pages 715, 719 and 720 of the record. It was very extensively manufactured by the Accurate Engineering Company prior to the acquisition of the business of that company by the International Harvester Company, it was adopted as the regular or standard equipment of the latter company on most of its engines, and at the time the witness testified (see bottom of page 719) the company had used between forty and fifty thousand of such equipments, and had largely abandoned the old

"unitary construction" previously supplied to it by plaintiff. (Rec., 714.) Indeed, to such an extent was this true that the witness did not know that the company was continuing to use the latter construction as regular equipment upon any of its engines (Rec., 715, 719), although it appeared from the subsequent testimony of Mr. Kleckner that such was the fact. At pages 719 and 720 of the record Mr. Cox gives at length the reasons why the Harvester Company preferred the two-unit construction of Exhibit No. 51 to plaintiff's unitary construction, and largely superseded the latter with it. Mr. Cox further testified (p. 715) to the "large quantities" of *rotary* magnetos that were being used by the Harvester Company at the time he gave his testimony—a type of magneto which plaintiff wholly ignores, as pointed out in our former reply brief (pp. 28, 29), in its repeated assertions (reiterated in its present brief) that eighty per cent of all of the magnetos used upon stationary gas engines at the present time are of plaintiff's so-called unitary construction and embody Kane's alleged invention.

The testimony of Mr. Cox and the exhibit (No. 51) referred to squarely contradict plaintiff's assertions at the page of its brief above referred to, as well as its later and similarly misleading statements on page 34.

In its effort to support the patentable novelty of Kane's alleged invention plaintiff reiterates the statements of its former brief respecting the large increase in the sales of the plaintiff's magnetos following the date of the alleged invention, but as pointed out in the reply brief heretofore filed by us (pp. 2-7) this large increase in sales did not come to pass until some four or five years after the date of Kane's invention, and was really due to plaintiff's abandonment of Kane's magneto and its adoption of Podlesaks' newly designed magneto embodying the inventions disclosed in and covered by the Podlesaks' patents found in the record. As pointed out in our former brief, plaintiff's very bill of complaint in this case alleges (Rec., 8) that plaintiff

"has built up a large and expanding and now lucrative business based wholly and entirely upon electric generators and ignition devices embodying the inventions of the said Podlesaks described, claimed and set forth in the aforesaid Podlesaks patents."

And its circular entitled "The Wonderful New Type 'K' " reproduced at page 657 of the Exhibit Book, and describing its latest and most improved form of magneto, says:

"The WEBSTER Type 'K' was made possible by the use of the Podlesak patents."

And at a later point, after enumerating the special advantages and features of the magneto, it further says:

"Although these features are the leading ones covered by the Podlesak patents there are numerous others which aid toward the easy handling of an engine."

The so-called Kane magnetos, which plaintiff put out in the earlier years, proved so unsuccessful and unsatisfactory that large numbers of them were called in and replaced by the Podlesak magnetos (see our former reply brief, pages 4-6, and Rec., 75-80), and in the later years they were entirely superseded by the Podlesak magnetos.

There is, therefore, clearly nothing in either the antecedents of Kane's alleged invention or in its subsequent history to negative the plain showing of the record that it was wholly lacking in the essential qualities of a patentable invention. The decision of the court, holding the claims in question to be invalid for lack of patentable invention over the prior art was right, and plaintiff's petition should be overruled.

EDWARD RECTOR,
DAVID B. GANN,
CHARLES L. STURTEVANT,
EUGENE G. MASON,
Counsel for Defendant-Appellant.

Endorsed: Filed March 25, 1921. Edward M. Holloway,
Clerk.

And afterwards, to wit: On the first day of April, 1921, in the October term last aforesaid, there was filed in the office of the clerk of this court a certain reply to appellant's answer to petition for a rehearing, which is in the following words and figures, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE SEVENTH CIRCUIT.

No. 2769.

SPLITDORF ELECTRICAL COMPANY,

Defendant-Appellant.

vs.

WEBSTER ELECTRIC COMPANY,

Plaintiff-Appellee.

REPLY TO APPELLANT'S "ANSWER TO PLAINTIFF-APPELLEE'S
PETITION FOR REHEARING."

LIVINGSTON GIFFORD,

LYNN A. WILLIAMS,

ROBERT M. SEE,

JEROME N. FRANK,

Counsel for Plaintiff-Appellee.

UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE SEVENTH CIRCUIT.

No. 2769.

SPLITDORF ELECTRICAL COMPANY,

Defendant-Appellant,

vs.

WEBSTER ELECTRIC COMPANY,

Plaintiff-Appellee.

REPLY TO APPELLANT'S "ANSWER TO PLAINTIFF-APPELLEE'S
PETITION FOR REHEARING."

Appellant's answer to appellee's petition for a rehearing is convincing that the rehearing should be granted, for it concedes that the court's opinion does not allude to that difference between Kane and Weber which the record proves is vital and of the essence of Kane's invention.

Although appellant's answer alleges that this unconsidered difference between Kane and the prior art "is perfectly plain," and was discussed in the main briefs before this court, the answer consists wholly of an involved argument allegedly addressed to the merits of this unconsidered question. The argument in reality, however, is largely directed to that minor difference be-

tween Kane and Weber which the court has already considered.

In the present situation there is no opportunity, and it would be improper to argue at length the merits of this undecided question of invention. To secure that opportunity is the function of the petition. In our petition, we pointed out some parts of the record and briefly outlined our views, in order to show to the court that there exists this fundamental question to which its opinion does not allude. In this reply it is equally impossible and improper fully to discuss the facts and argue the merits of this undecided question, but we do feel compelled to indicate briefly that the arguments suggested in appellant's answer are wholly refutable.

Appellant's argument, as did the court's opinion, treats the preservation of *merely mechanical* synchronism between the separation of the electrodes and the movement of the armature shaft as the gist of Kane's invention. This is an obviously "political move" intended, no doubt, to suggest to the court that it has considered and decided upon the important difference between Kane and Weber. This matter of *mechanical* synchronism is a relatively minor feature of the Kane invention, and has to do solely with that difference between Kane and Weber which the court has already considered. We do not question the court's decision on that matter.

Appellant's argument glosses over and belittles (and the court's opinion does not allude to) the vital difference between Kane and the prior art which constitutes the very essence of the Kane invention.

Kane for the first time in the art produced a magneto ignition equipment which could be operated either on the engine or off the engine, and in which the *observable* spark when *off* the engine is and must be *identical* with

the *unobservable* spark when *on* the engine. The Kane unitary equipment, when removed from the engine to be cleaned and tested, is capable of absolute test because it operates in precisely the same way to produce identically the same spark, whether it is on or off the engine. This is wholly untrue of Weber or of anything that preceded Kane—it was a new result never before achieved, and is the foundation of the success of magneto ignition equipment for stationary engines. This is the essence of the Kane invention, and it is due wholly to that difference between Kane and Weber to which the court's opinion makes no allusion.

Appellant's answer urges (page 9) that

“it was quite impracticable to retract (Kane's) armature against the resistance of its springs with one's fingers or hands, when the magneto was detached from the engine, and it was not practical to do it in any definite or useful way with any mechanical device prior to the Podlesak invention.”

This statement is wholly unfounded in fact, and can be so demonstrated. The Podlesak invention, however, does offer a striking demonstration of the essential difference between Kane and Weber. The Podlesak invention referred to is the starting lever 4-5 of Podlesak's patent 1,101,956 (Exhibit Book, page 898). This lever provides a convenient means for cocking and releasing the rotor of the magneto which, on its release, is returned to its normal position by the action of the driving spring mechanism precisely as if it had been cocked and released by the engine itself. But if Weber's magneto be removed from its engine, it could not be operated in any manner whatever by this lever (which was designed by Podlesak as an addition to Kane), because of the absence of the driving spring mechanism. The fact that this lever is operative in an effective and valuable manner in the one case, while it is of no utility whatever in

the other case, is simply another demonstration of the inherent difference between Kane and Weber.

This vital difference between Kane and Weber, concerning which the court's opinion is silent, also has an important result in the matter of synchronism, which the court did not appreciate or mention in its discussion of synchronism, and which appellant's answer ignores.

The *merely mechanical* synchronism between the movement of the rotor and the movement of the spark electrodes is easy to see and to understand but, as the record conclusively establishes, the phase of the electric current wave is dependent not only upon the distance through which the rotor moves, but also upon the *manner* in which it moves—whether fast or slow, whether at constant speed or acceleratingly or deceleratingly.

It is impossible by hand turning of the rotor to duplicate, either in degree or kind, the motion which is imparted to the rotor by its driving spring mechanism. This means that it is impossible by hand turning to duplicate either in shape or in phase the electric current wave with whose almost instantaneous peak the opening of the spark electrodes must be synchronized.

It is true, of course, that if Weber's bracket 53 be rigidly and permanently secured to his ignition block 3 that "the crank arm and the hammer arm" will "hold their relative positions with respect to each other intact." While this may effect the preservation of the *merely mechanical* synchronism regardless whether these parts be on or off the engine, it does not by any means insure the preservation of the *vital electrical* synchronism between the peak of the generated current wave and the opening of the spark electrodes. In other words, the peak of the current wave may possibly be made to synchronize perfectly with the opening of the electrodes when Weber's

magneto is removed from the engine and rotated by hand, while that adjustment will not produce any synchronism whatever when the magneto is placed upon the engine and operated by the spring driving mechanism.

The argument in appellant's answer proceeds upon the assumption that, if the synchronism between the current wave and the opening of the electrodes is once secured, this synchronism will be preserved intact whenever the magneto is mounted on the engine. But not only is the necessary electrical synchronism destroyed whenever Weber's magneto is removed from the engine, but it cannot be preserved even if the magneto remains upon the engine. The sharp impact of the electrodes and of Weber's arm 41 on the adjusting screw 27 of the crank arm 26, occurring at every impulse of the engine, rapidly wears these parts away. It was for the very purpose of readjusting the instant at which the spark electrodes should be opened that Weber provided the adjusting screw 27.

In Kane, the unitary equipment can be removed from the engine and the corresponding anvil screw can be adjusted until the necessary electrical synchronism is secured, as determined by an ocular observation of the spark. The spark thus secured when the equipment is removed will be identically repeated when the equipment is replaced on the engine. In Weber, on the other hand, the anvil screw may be adjusted while the magneto is removed from the engine, but whether the electrical synchronism necessary for engine operation has been secured, can never be determined in the absence of the driving spring mechanism, and the effect of this mechanism can be obtained only by replacing the magneto upon the engine. When the magneto is replaced upon the engine, the spark electrodes are concealed within the cylinder wall of the engine, and it is impossible to ob-

serve or test the spark in any way. In Kane, the spring-actuated operation of the mechanism upon the release of the rotor is identically the same, whether the rotor be cocked by hand when the equipment is removed from the engine or by the push-rod when the equipment is replaced. Consequently, synchronism secured when the equipment is removed is inevitably the synchronism desired in engine operation. In Weber, while it may be possible to secure some approximation of synchronism by adjustment made during hand operation of the rotor, that adjustment will certainly fail to produce synchronism when the rotor is actuated by the spring mechanism after the equipment is replaced on the engine.

Appellant's counsel urge (page 10) that the combination of Kane's claims 7 and 8 is not patentable because it would not involve invention to substitute the magneto of Milton's patent No. 1,053,107, or of Hennig patent 916,312 for the magneto shown by Weber, in view of the fact that the Wattles patent 909,264 illustrated a magneto mounted upon the igniter block of the gas engine. This, of course, is merely the stock argument of every defendant. If an anticipation is not to be found, then combine this part of one mechanism with that part of another, and presto—you have the exact combination of the patent in suit. The substitution suggested by counsel would involve radical reorganization, but regardless whether mechanically simple or complex, the fact remains that no one prior to Kane had the happy and tremendously successful thought of doing it.

As to the Wattles device, it did not have any driving spring mechanism whatever. The armature of the magneto was intended to be rotated by a piston acted upon by the compression of air and gas in the engine cylinder. The record shows that the Wattles patent was not

merely a paper one, for there is positive testimony that Wattles tried for months in the shops of the International Harvester Company to make his device operate, and failed (Record, p. 293). The Wattles patent never did suggest, and it never could have suggested, a combination of Weber and Milton or Hennig, or the entirely different combination of Kane's claims 7 and 8.

Appellant's counsel (attempting to answer our proposition that the importance of the difference between Kane and Weber is shown by the fact that the Accurate Engineering Company, after having bought the Weber patent, at once abandoned Weber's two-group idea and adopted the unitary construction of Kane) urges that the Accurate Engineering Company manufactured and sold mainly a two-group equipment. That equipment was neither Kane nor Weber.

Appellant's witness, Henry G. Cox, testified (Record, page 716) that the total magneto business of the Accurate Engineering Company outside of its sales to the Harvester Company was as follows:

"It had an order for 5,000 equipments from the Associated Manufacturers, but did not fill it all—probably filled about 500, and the same number to the Acme Engine Company, which failed and went out of business. About 2,000 were sold and delivered to Fuller & Johnson. The latter were rotating magnetos. Some oscillating magnetos were supplied to Fuller & Johnson, but not of a unitary construction, nor of the construction shown in Defendant's Exhibit 51."

As to the International Harvester Company, Mr. Cox's testimony shows (Record, page 714) that "Mr. Ed Johnson was interested in the (Accurate Engineering) Company at the time it was organized in 1914," and that at the same time "he was superintendent of

the Tractor Works of the International Harvester Company," and that the Harvester Company "began the use of the equipment furnished by the Accurate Engineering Company about May, 1914, on what they called their side shaft line (of engines), built by or under Johnson's directions at the Tractor Works." It is these sales by Mr. Johnson to Mr. Johnson for the "particular style of engine" designed by Mr. Johnson, that counsel for appellant dilate upon. But the equipments thus sold by Mr. Johnson to himself, only about 1,000 of which the Accurate Company was able to sell to other parties, were not in any particular Weber devices. The outstanding fact in the history of the Accurate Company is that it bought the Weber patent, and insofar as it attempted to use Weber's ideas at all, it abandoned his two group idea and adopted Kane's unitary construction.

Appellant's counsel further urge (page 15) that the "large increase in sales (by the Webster Electric Company) did not come to pass until some four or five years after the date of Kane's invention, and was really due to plaintiff's abandonment of Kane's magneto, and its adoption of Podlesak's newly designed magneto embodying the inventions disclosed in and covered by the Podlesak patents."

We do not hesitate to concede that the Webster Electric Company improved and refined its equipment from time to time, and that Podlesak had much to do with this improvement. But the fundamental fact remains that it was solely the Kane unitary equipment that averted the Webster Company's failure, and that Podlesak's improvements could not have been made except upon the foundation of Kane's underlying invention. There was no abandonment of Kane and substitution

of Podlesak, as appellant's counsel insinuate. Although the Webster equipment has been improved from time to time by Podlesak and others, Kane's unitary construction has been used continually to the exclusion of all else since the day of Kane's invention.

We submit, therefore, that plaintiff's answer to our petition serves merely to emphasize the fact that the essence of the Kane invention and the vital difference between Kane and the prior art has not been appreciated or considered. It is the fundamental question in this case. Heretofore it has been so hidden among the many other complex questions in the case that neither party has had the opportunity fully to argue this question, as a consequence of which the court's opinion does not allude to it.

Our petition for rehearing fully accepts the court's opinion so far as it goes, and thus brings out for single consideration the essence of the Kane invention and the real distinction between Kane and the prior art. We submit that the petition for rehearing should be granted in order that all of the facts and arguments bearing on this single question may be fully appreciated and considered.

Respectfully,

LIVINGSTON GIFFORD,

LYNN A. WILLIAMS,

ROBERT M. SEE,

JEROME N. FRANK,

Counsel for Plaintiff-Appellee.

And afterwards, on the same day, to wit, the first day of April, 1921, in the October term last aforesaid, there was filed in the office of the clerk of this court a certain notice, which said notice is in the following words and figures, to wit:

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit

Splitdorf Electric Company,
Defendant-Appellant,
vs.
Webster Electric Company,
Plaintiff-Appellee.

No. 2769

NOTICE.

Edward Rector,
McCormick Building,
Chicago.

Of Counsel for Appellant.

Please take notice that we are filing today in the United States Circuit Court of Appeals for the Seventh Circuit a reply to Appellant's answer to Plaintiff-Appellee's petition for rehearing, two copies of which are enclosed herewith.

LYNN A. WILLIAMS

ROBERT H. SEE

Of Counsel for Plaintiff-Appellee.

Chicago, Illinois,
April 1, 1921.

Received copies of the above notice and of the printed reply referred to therein, this first day of April, 1921.

EDWARD RECTOR

Of Counsel for Defendant-Appellant.

Endorsed: Filed April 1, 1920. Edward M. Holloway,
Clerk.

And afterwards, to wit: On the sixth day of December, 1921, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

Tuesday, December 6, 1921.

Before:

Hon. Francis E. Baker, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

| | | |
|--------------------------------------|-----|---|
| Splitdorf Electrical Company 2769 | vs. | } Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division. |
| Webster Electric Company. | | |

It is ordered by the court that this cause be, and the same is hereby re-set down for oral argument, limited to the issues respecting the Kane patent, and placed upon the calendar for the January session, 1922, of this court. It is further ordered that this oral argument be on Friday, January 6th, 1922, at ten o'clock A. M.

Endorsed: Filed December 6, 1921. Edward M. Holloway,
Clerk.

And afterwards, to wit: On the sixth day of January, 1922, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

Friday, January 6, 1922.

Court met pursuant to adjournment and was opened by proclamation of erier.

Present:

Hon. Francis E. Baker, Circuit Judge, presiding.

Hon. Samuel Alschuler, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

Edward M. Holloway, Clerk.

Robert R. Levy, Marshal.

Before:

Hon. Francis E. Baker, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

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| Splittorf Electrical Company | } | Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division. |
| 2769 vs | | |
| Webster Electric Company | | |

Now this day come the parties by their counsel and this cause now comes on to be heard on the issues respecting the Kane patent and the printed record and briefs of counsel and on oral arguments by Mr. Edward Rector, counsel for appellant, and by Mr. Lynn A. Williams, counsel for appellee, the court having heard the same takes this matter under advisement.

And afterwards, to wit: On the eighth day of May, 1922, in the October term last aforesaid, there was filed in the office of the clerk of this court a certain opinion, which said opinion is in the following words and figures, to wit:

IN THE UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

No. 2769

OCTOBER TERM, 1921, APRIL SESSION, 1922.

Splitdorf Electrical Company,

*Appellant,**vs.*

Webster Electric Company,

Appellee.

Appeal from the District Court
of the United States for the
Northern District of Illi-
nois, Eastern Division.

ON REHEARING.

Before BAKER, EVANS and PAGE, *Circuit Judges.*

EVANS, *Cir. J.*: A rehearing in this case was granted because of uncertainty as to the correctness of our conclusion respecting the validity of claims 7 and 8 of the Kane patent.

In appellee's original brief the Kane invention was described as follows: "At this junction Mr. Kane invented the unitary magneto ignition equipment of his patent in suit.

* * * In this device the magneto and the igniter plug are no longer separated, but are brought into one unitary structure, with no link mechanism intervening, between the movable electrode and the armature shaft. * * * Speaking of its results, counsel said, "When it is necessary to clean the spark plug or to test or adjust the mechanism, the whole unitary structure may be removed, and its operation adjusted and its spark observed in the open, and it may then be put back on the engine with absolute assurance that it will function in operative position precisely as it did when removed from the engine."

This position of counsel invited the observation of the court that "the essence of the contribution was the unitary structure made possible by the rigidly and inseparably connected parts, the magneto generator, and the unitary block."

The correctness of this position is now challenged because we failed to consider the effect of uniting in a single unitary structure *all* of the operating mechanism of the equipment, including, of course, the two elements aforementioned. We assumed in determining the validity of the claim that the

Kane magneto ignition equipment was unitary in structure and permitted the operator to remove it from the engine whereby it might be better examined and replaced without changing the relative position of the two parts mentioned and without disturbing the synchronism so much desired. We failed to appreciate fully what is now claimed as an important and valuable result, viz., the creation of a spark, when the equipment is off the engine, identical with the spark produced when it is on the engine. In other words, inspection is for the purpose of locating trouble and trouble generally is located in the spark or in its absence. Obviously the spark which the mechanic or operator endeavors to produce off the engine must be such a spark as is produced ordinarily when the magneto equipment is in its place on the engine.

The claim provides for an integral support upon which *all of the aforesaid parts are mounted*. The words "*all of the aforesaid parts*" are not properly restricted to the magneto and igniter plug.

Appellee now asserts that the Kane unitary equipment when removed from the engine to be cleaned or tested is capable of a satisfactory test because it operates in precisely the same way to produce identically the same spark whether on or off the engine.

The question before us is one of patentability. While invention will not be determined by results obtainable, we have referred to the production of the spark on or off the engine to emphasize the use of the word "all" in the claims. Stressing, as we must, the provision which calls for the integral support upon which "*all of the aforesaid parts are mounted*," the question of patentability becomes a close one.

We have, upon a consideration of all of the evidence (extent of use, the effect of allowance by the patent office, the decision of the district judge, the prior art, as well as all the other evidence), come to the conclusion that our first decision is incorrect and that patentable novelty is here disclosed.

It would serve no useful purpose to elaborate upon the reasons that impell us to reach this conclusion. The question has been twice fully argued and counsel have apparently appreciated the closeness of the issue. Whether type of construction manifested by size or location of parts constitutes invention must in the last analysis turn upon the facts in each particular case. Ordinarily, we might say, to construct a unitary structure without changing parts would not be invention. On the other hand, the unitary structure

may have the parts so mounted as to result in a type or form so simple of operation or so handy and convenient in size or shape as to produce desirable results, which have been long but unsuccessfully sought by those skilled in the art. A finding in support of which there is some evidence, that others skilled in the art failed after diligent effort to solve the problem must, of course, be considered as rather persuasive in determining whether such advance constitutes invention.

Believing that we have erred in our previous conclusion, we avail ourselves of this opportunity to correct it.

This conclusion respecting the patentable novelty back of claims 7 and 8 makes it necessary for us to consider one of the other defenses not heretofore considered by this court.

In order to appreciate the defense of laches a more complete and detailed statement of the facts is necessary.

Kane's original application for patent No. 1,204,573 was filed February 2, 1910 and was allowed November 14, 1916. The divisional application was filed January 14, 1915 and allowed September 24, 1918. Milton's patent No. 1,096,048 was applied for October 28, 1910 and allowed May 12, 1914. On August 17, 1915 the Milton patent was placed in interference with the pending Kane application and Kane won. The circumstances under which this decision was obtained destroy its effect, and counsel for appellee do not rely upon the adjudication of the patent office in respect to the issue of priority but rest upon finding of the district judge.

The Podlesak reissue patent No. 13,878 was issued February 9, 1915, upon application filed December 23, 1914, the original patent being No. 1,055,076, issued March 4, 1913.

Kane by amendment filed April 17, 1915, introduced nine new claims, three being copies from the Podlesak original patent, and the remaining six from the reissue patent. These nine claims were rejected on various grounds, one of them being "that Kane had no right to make the claims in issue because of laches on his part, the claims not having been presented by him for more than two years after the issue of the original Podlesak patent and not until some time after the issue of the reissued patent." The board of examiners in chief sustained Podlesak's contention, and it was held that the claims were barred by Kane's laches.

Kane acquiesced in the decision with respect to three of the claims, which three claims correspond with those in Podlesak's original patent, but appealed to the commissioner in respect to the remainder, the ones similar to those in the

Podlesak reissue patent. The commissioner affirmed the decision of the examiners in chief, but upon a different ground, viz., that the claims in question were not readable on Kane's disclosure. The court of appeals finally disposed of the matter against Kane, basing its decision both upon Kane's laches and upon the further ground that the claims were not readable upon Kane's disclosure.

Following this decision Kane, on June 17, 1918, filed an amendment by which he introduced the two new claims, 7 and 8, now in issue.

Kane's attorney in presenting claims 7 and 8 stated to the examiner:

"The decision of the Court of Appeals is, of course, binding upon the primary examiner to the effect that Kane is now estopped to make these specific detailed claims of the Podlesak patent because of his delay in so doing.

"In so far as any prosecution of this application before the primary examiner is concerned [we promptly concede that we are bound by the estoppel of *res adjudicata* and by the Court of Appeals].* It is clear, however, that this estoppel does not and cannot run as against the claims now presented.

"The two claims presented herewith are not limited to any of these refinements or details."

It is upon the foregoing facts and others hereinafter related, that we must dispose of the question of laches.

An inventor of a patent may lose his right thereto by waiver, by public grant, by estoppel or by laches. By failure to apply to the government for a patent within the statutory period of two years he loses his right as effectively as if he made specific grant thereof to the public. If in his application he seeks but a part of the claims to which he is entitled, he waives all right to those not claimed. He makes a donation to the public and his right to the monopoly is gone forever.

While the results are the same, there is, of course, a difference in the evidence which shows a grant to the public and the evidence which supports the defense of laches.

In support of the contention that section 4886 R. S. requires a divisional application to be filed within two years from the allowance and publication of a patent covering the same claims appellant cites *Chapman v. Wintroath*, 252 U. S. 126. Subsequent to the filing of the original brief the following additional authorities were submitted, all based upon the views expressed in *Chapman v. Wintroath*. *De Ferranti v.*

Harmatta, 273 Fed. 357; *Ransdall v. Jahns*, 273 Fed. 365; *Repogle v. Kirby*, 269 Fed. 862; *Wells v. Honigmann*, 267 Fed. 743. Our attention has been called to no case holding the contrary and we have found none upon independent investigation.

True, the precise question here presented was not squarely raised and therefore not decided in *Chapman v. Wintroath*. In that case the divisional application was denied (no hearing was had and no evidence was received) solely on the ground that it was not made within *one year* from the date of the allowance of a patent covering the same claims to another. Appellants contend, however, and we agree with the courts that have passed upon the question that the effect of the holding, is to fix the period, during which such application must be filed, at *two years* from the date of the issuances of the other patent. No other deduction can fairly or logically be drawn from the discussion of the question in that opinion.

In fact this was the effect of the holding upon the 9 claims that Kane copied from the Podlesak patent, all of which were rejected because not timely made, and to which ruling appellee acquiesced. The facts in the present suit are distinguishable from the Chapman case in that the claims were not identical with any claims in any issued patent. While this distinction may be made, it appears that the difference does not justify a different conclusion being reached. The claims in question differ only in that they are more broad, more generic, than the specific claims that were rejected in the interference contest.

But we are not required to rest our decision solely upon the two year period fixed by the statute. Laches may arise and become an effective bar to relief under a variety of circumstances. Laches is based upon delay and delay is a relative term.

In the last paragraph of the opinion in *Chapman v. Wintroath* we find the court referring to laches other than that defined and fixed by the statute by calling attention to the absence of any evidence in the case under consideration that would warrant any such finding. The court says:

"As has been pointed out, the Examiner of Interferences did not permit the introduction of any evidence with respect to laches or abandonment and the Court of Appeals rests its judgment, as he did, wholly upon the delay of the Chapmans in filing their divisional application for more than one year

after the Wintroath patent was issued, as this appeared 'on the face of the record.' While not intending to intimate that there may not be abandonment which might bar an application within the two-year period allowed for filing, yet upon this discussion of the statutes and decisions, we cannot doubt that upon the case disclosed in this record, the Chapmans were within their legal rights in filing their divisional application at any time within two years after the publication of the Wintroath patent, and therefore the judgment of the Court of Appeals must be reversed."

Turning to the facts in the present case and for the moment ignoring any two-year rule, we find Kane's position in support of claims 7 and 8 untenable. Not only did he not intend to make these claims, in fact he knowingly and intentionally failed to present them, but not until eight years after he filed his original application and more than nine years after the device was in common use, during all of which time it was in general use, did he seek to dominate the art by inserting these amended claims into the patent.

When examined as to the new combination represented by these two claims, he testified that he had knowingly failed to claim it. The following testimony appears:

"Q. What? Didn't Mr. Webster ask you to help him out in connection with the means of fastening the magneto and the plug to the engine?

A. No, sir, he did not.

Q. He didn't discuss that at all with you prior to the time that you filed your application?

A. He did prior to the time we filed the application.

Q. Well, when was it he discussed that with you?

A. Discussed that with me when I showed him the drawing.

Q. Mr. Kane, is there anything on that drawing,—the first one that you had,—showing any means of regulating or determining what you call the cut-out of the spark?

A. No, sir, there is not.

Q. How, what did you tell him about the means by which the magneto and plug were to be attached to the cylinder?

A. Well, outside of telling him that by doing that we had a means of securely fastening the magneto to the cylinder, and also a means of cutting out a lot of intermediate and useless mechanism, I do not know as I told him very much.

Q. You did not consider it of very much importance; is that right?

A. It seemed to me a matter more of design than importance—invention.

Q. Is that what you told him?

A. Yes, sir.

Q. And you told him that you thought that it was not an invention, and was a mere matter of design? You told that to Mr. Sprinkle, did you, when you went to him to get a patent?

A. I told him it was a good means and preferred means of fastening the magneto on the engine.

Q. Well, I asked you if you told him that you thought it was a mere matter of design, and not an invention.

A. I possibly did, yes."

Believing that the Podlesak invention was controlled through contract and otherwise, appellee was not greatly concerned about the question of who was the first inventor. Its attitude in the Milton-Kane contest is not such as to invite the court's confidence in the sincerity of its protestations nor in the good faith of its assertion that it was not endeavoring to improperly prolong its monopoly beyond the period fixed by statute. Having secured a favorable decision from the patent office in this interference contest through control and ownership of both sides of the litigation, it then discovered that its asserted rights under its patent and under its contract with Podlesak were challenged, and it again amended its specifications, inserting the new claims which necessitated an interference contest with Podlesak. This contest was bitterly fought, appeals being taken from the examiner and then to the patent commissioner, and then to the Court of Appeals, with the result that appellee was found guilty of laches and the decision went against it.

Appellee filed the aforementioned amended application incorporating these nine new claims on April 17, 1915; the first three were taken from the Podlesak patent issued March 4, 1913, and the other six from the Podlesak reissue patent dated February 9, 1915. In this adverse decision appellee acquiesced, wherefrom it appears that if appellee was guilty of laches in April 1915 for failure to present the nine claims under consideration, it must *a fortiori* be found guilty of laches in failing to present claims 7 and 8 until June 17, 1918. The allowance of these last two claims upon the amendment of June 17, 1918, was upon *ex parte* application and was made

by the examiner, the adverse parties, of course, not being present to protest or point out the error of such allowance. The claims differ, as heretofore stated, from the claims in the Podlesak patent in that they are broader in scope, but the difference is not sufficient to avoid the effect of the decision in the Podlesak interference contest. They depend for their support largely, if not entirely, upon that part of the specifications which were incorporated by amendment in 1915, which amendment was made to support the nine claims taken from the Podlesak patent and subsequently rejected as heretofore described.

We conclude Kane's laches barred his right to claims 7 and 8.

The decree is reversed with directions to dismiss the bill.
A true Copy.

Teste:

*Clerk of the United States Circuit Court
of Appeals for the Seventh Circuit.*

And afterwards on the same day, to wit: the eighth day of May, 1922, in the October term last aforesaid, the following further proceedings were had and entered of record, to wit:

Monday, May 8, 1922.

Court met pursuant to adjournment.

Present:

Hon. Francis E. Baker, Circuit Judge, presiding.

Hon. Samuel Alschuler, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

Edward M. Holloway, Clerk.

Before:

Hon. Francis E. Baker, Circuit Judge.

Hon. Evan A. Evans, Circuit Judge.

Hon. George T. Page, Circuit Judge.

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|------------------------------|---|---|
| Splitdorf Electrical Company | } | Appeal from the District Court of the United States for the Northern District of Illinois, Eastern Division. |
| 2769 <i>vs</i> | | |
| Webster Electric Company | | |

This cause came on to be reheard on the transcript of the record from the District Court of the United States for the Northern District of Illinois, Eastern Division, and was argued by counsel.

On consideration whereof, it is now here ordered, adjudged and decreed by this court that the decree of the said District Court in this cause be, and the same is hereby reversed with costs; and that this cause be, and the same is hereby remanded to the said District Court with directions to dismiss the bill.

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

I, Edward M. Holloway, Clerk of the United States Circuit Court of Appeals for the Seventh Circuit, do hereby certify that the foregoing pages, numbered from 823 to 926, inclusive, contain a true copy of the proceedings had and papers filed (excepting briefs of counsel and stipulations and orders relating to time of filing same) in the following entitled cause:

Splitdorf Electrical Company

vs.

Webster Electric Company

No. 2769, October Term, 1921, as the same remains upon the files and records of the United States Circuit Court of Appeals, for the Seventh Circuit.

In testimony whereof I hereunto subscribe my name and affix the seal of said United States Circuit Court of Appeals for the Seventh Circuit, at the City of Chicago, this twenty-fifth day of July, 1922.

(Seal)

EDWARD M. HOLLOWAY,
*Clerk of the United States Circuit Court of
Appeals for the Seventh Circuit.*

Vol. II.
TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1922.

No. 93.

WEBSTER ELECTRIC COMPANY, PETITIONER,

vs.

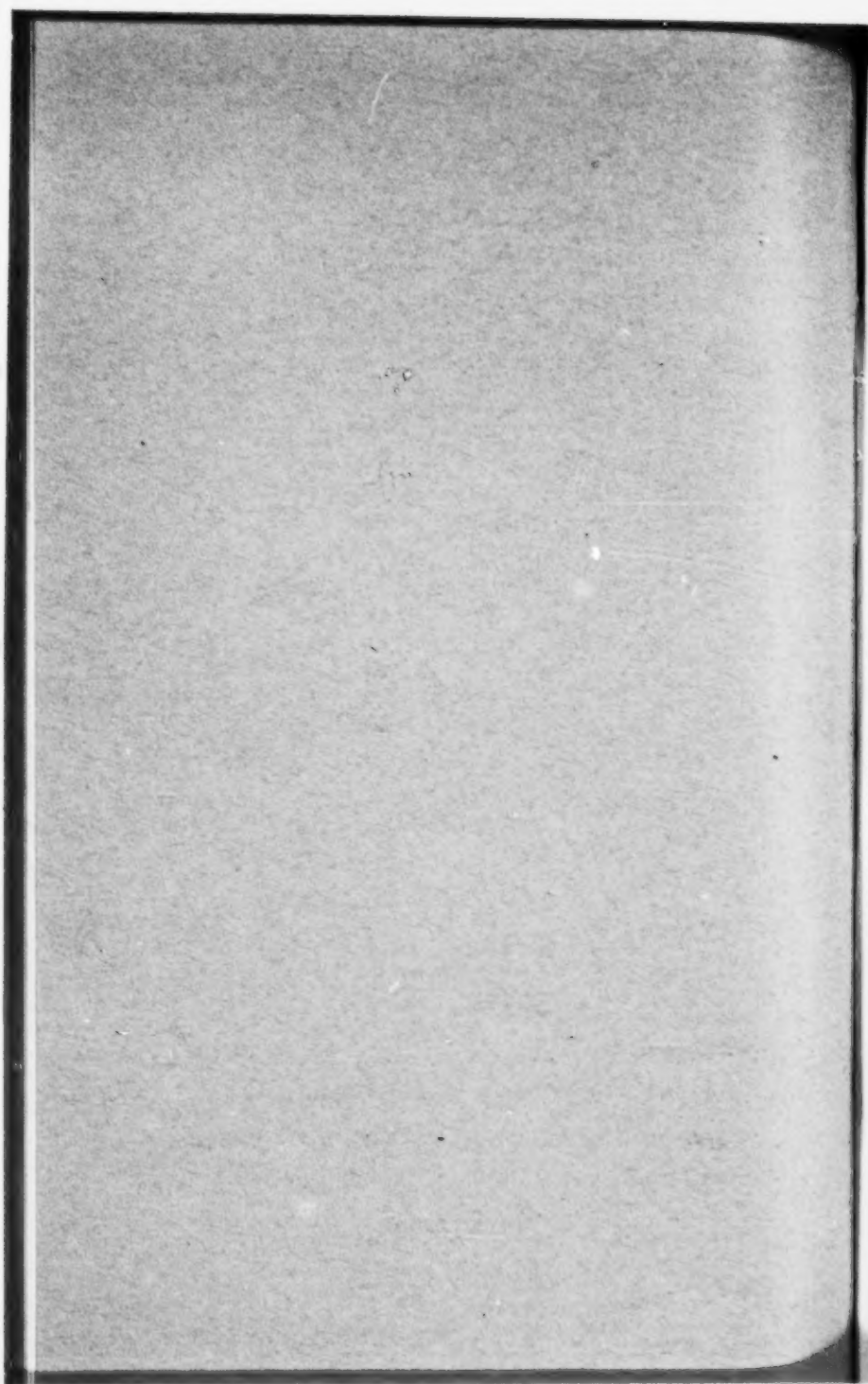
SPLITDORF ELECTRICAL COMPANY.

**ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE SEVENTH CIRCUIT.**

PETITION FOR CERTIORARI FILED JULY 31, 1922.

CERTIORARI AND RETURN FILED DECEMBER 13, 1922.

(29,070)



(29,070)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1923.

No. 93.

WEBSTER ELECTRIC COMPANY, PETITIONER,

v.s.

SPLITDORF ELECTRICAL COMPANY.

**ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE SEVENTH CIRCUIT.**

VOLUME II.

INDEX.

| | Page. |
|--|-------|
| Plaintiff's Exhibit No. 1—Letter, March 15, 1909, International Harvester Co. to experimental department.... | 1 |
| No. 2—Letter, April 29, 1909, Webster to International Harvester Co.—Attention of A. E. Mayer | 2 |
| No. 3—Letter, March 17, 1909, International Harvester Co. to E. H. Kimbark..... | 3 |
| No. 4—Letter, June 11, 1909, International Harvester Co. to experimental department.... | 3 |
| No. 5—Photograph | 5 |
| No. 6—Decision recording change in design or material | 7 |
| 7—Letter, June 3, 1909, Webster Mfg. Co. to Cavanagh | 7 |

| | Page. |
|--|-------|
| Plaintiff's Exhibit No. 8—Extract from report of meeting No. 176, May 20, 1909, in re Milton magneto..... | 8 |
| No. 9—Letter, May 26, 1909, International Harvester Co. to Cavanaugh..... | 8 |
| No. 10—Letter, May 6, 1909, Kimmark to Mayer..... | 9 |
| No. 13 and Kane's Exhibit No. 1—Pamphlet illustrating link type machine of 1909..... | 11 |
| No. 16 and Kane's Exhibit No. 2—Pamphlet illustrating self-contained construction of 1909.... | 15 |
| Kane's Exhibit No. 7—Drawing of April 11, 1909.... | 27 |
| No. 18 and Kane's Exhibit No. 5—Kane's Manila paper drawing..... | 29 |
| No. 42—Record in case of Emil Podlesak et al. vs. Sumter Electrical Co. in U. S. district court, eastern district of South Carolina... | 31 |
| Bill of complaint..... | 31 |
| Subpoena ad respondendum..... | 36 |
| Return on service of writ..... | 37 |
| Notice | 38 |
| Order extending time for defendant to answer.. | 38 |
| Return on service of writ..... | 39 |
| Petition for order extending time to answer.... | 39 |
| Assignment from Emil Podlesak and Henry Joseph Podlesak to Webster Electric Co., dated September 4, 1915..... | 41 |
| Order of discontinuance..... | 46 |
| Certificate of clerk..... | 47 |
| No. 46a—Oscillogram of current curve plaintiff's device | 49 |
| No. 49—Defendant's device, type A, front diagram.. | 51 |
| No. 50—Defendant's device, type B, front diagram.. | 53 |
| No. 51—Defendant's device, type C, front diagram.. | 55 |
| No. 52—Defendant's device, type B, side perspective. | 57 |
| No. 55—Engine cycle..... | 59 |
| No. 56—Defendant's device, type A, right side..... | 61 |
| No. 57—E. J. Kane's device, top view..... | 63 |
| No. 57a—E. J. Kane's device, side view..... | 65 |
| No. 59—Record in case of Emil Podlesak et al. vs. Alamo Mfg. Co. in U. S. district court, eastern district of Michigan, southern division. | 67 |
| Answer of Emil Podlesak to certain of defendant's interrogatories..... | 67 |
| Certificate of clerk..... | 68 |
| Amended bill of complaint..... | 69 |
| Certificate of clerk..... | 74 |
| Motion to dismiss..... | 75 |
| Certificate of clerk..... | 76 |
| Motion to amend answer..... | 77 |
| Certificate of clerk..... | 78 |
| Order granting defendant's motion for leave to amend answer..... | 79 |

INDEX.

iii

| | Page. |
|--|-------|
| Plaintiff's Exhibit No. 59—Certificate of clerk..... | 80 |
| Motion to take a deposition..... | 80 |
| Affidavit of Lynn A. Williams..... | 81 |
| Certificate of clerk..... | 82 |
| Order granting motion to take a deposition..... | 83 |
| Certificate of clerk..... | 84 |
| Deposition of Henry J. Podlesak..... | 84 |
| Notary's certificate..... | 88 |
| Summons | 89 |
| Certificate of clerk..... | 90 |
| Motion for an order dropping the case from the trial calendar..... | 90 |
| Affidavit of Robert M. See..... | 91 |
| Certificate of clerk..... | 92 |
| Final decree..... | 93 |
| Certificate of clerk..... | 94 |
| No. 60—Affidavit of Lynn A. Williams..... | 95 |
| Exhibit A—Telegram, December 2, 1915, Sumter Electrical Co. to Williams..... | 96 |
| Exhibit B—Telegram, December 2, 1915, John F. Alvord to Williams..... | 96 |
| Exhibit C—Letter, December 2, 1915, Sumter Electrical Co. to Williams..... | 97 |
| Exhibit D—Telegram, December 2, 1915, Sumter Electrical Co. to Williams..... | 97 |
| Exhibit E—Letter, December 2, 1915, Splittdorf Electrical Co. to Williams..... | 98 |
| No. 61—Letter, August 10, 1915, addressed to "Dear Van" | 98 |
| No. 62—Voucher check for \$6,728.90, dated January 13, 1919, Webster Electric Co. to Splitt- dorf Electrical Co..... | 101 |
| No. 64—Escrow agreement between John L. Milton and Webster Electric Co., dated April 10, 1912 | 103 |
| Acceptance of escrow, signed by Lynn A. Wil- hams | 105 |
| Agreement between John L. Milton and Webster Electric Co., dated April 10, 1912..... | 106 |
| Assignment from John L. Milton, dated April 10, 1912 | 111 |
| Notary's certificate..... | 112 |
| No. 65—Agreement between John L. Milton and Web- ster Electric Co., dated November 23, 1907. | 113 |
| No. 66—Letter and envelope, dated May 5, 1916, Gerald D. Chiville to John L. Milton..... | 121 |
| No. 67—Letter, May 9, 1916, Milton to Chiville..... | 123 |
| No. 68—Letter, October 11, 1915, Milton to Williams., | 124 |
| Letter, November 5, 1915, to Milton..... | 124 |
| Letter, November 19, 1915, to Milton..... | 125 |

| | Page. |
|--|-------|
| Plaintiff's Exhibit No. 68—Letter, November 20, 1915, Milton to Williams | 125 |
| Letter, December 30, 1915, Williams to Milton | 126 |
| Letter, January 3, 1916, Milton to Williams & Bradbury | 127 |
| Letter, January 4, 1916, Williams & Bradbury to Milton..... | 127 |
| Letter, January 6, 1916, Milton to Williams & Bradbury | 128 |
| Letter, January 11, 1916, Williams & Bradbury to Milton..... | 128 |
| Letter, May 3, 1916, Williams, Bradbury & See to Milton..... | 129 |
| Letter, May 5, 1916, Milton to Williams, Bradbury & See..... | 129 |
| Telegram, May 6, 1916, Williams, Bradbury & See to Milton..... | 130 |
| Letter, May 9, 1916, to Milton..... | 130 |
| Letter, September 11, 1916, to Milton..... | 131 |
| Letter, Milton to Williams, Bradbury & See. | 131 |
| Letter, October 27, 1916, to Milton..... | 132 |
| Letter, October 28, 1916, to Williams, Bradbury & See..... | 132 |
| Telegram, October 28, 1916, Milton to Williams, Bradbury & See..... | 133 |
| Letter, December 1, 1916, to Milton..... | 133 |
| Letter, December 5, 1916, Milton to Williams, Bradbury & See..... | 134 |
| Letter, December 18, 1916, to Milton..... | 134 |
| Letter, December 26, 1916, Milton to Williams, Bradbury & See..... | 135 |
| Letter, December 27, 1916, to Milton..... | 136 |
| No. 68A—Letter, May 12, 1916, to Wm. Kroeplin..... | 136 |
| No. 68B—Letter, May 15, 1916, Kroeplin to Williams, Bradbury & See..... | 137 |
| No. 68C—Letter, May 18, 1916, to Kroeplin..... | 138 |
| No. 68D—Letter, May 20, 1916, Kroeplin to Williams, Bradbury & See..... | 139 |
| No. 74—Letter, September 9, 1908, Webster to Milton | 139 |
| No. 75—Telegram, May 7, 1909, Webster to Webster Mfg. Co..... | 140 |
| No. 77—Oscillogram of defendant's device, type B.... | 141 |
| No. 78—Diagram defendant's device, type B, illustrating angles of striking..... | 143 |
| No. 80—Trust agreement between John L. Milton and Webster Electric Co., dated December 11, 1915..... | 145 |
| Acceptance of trust, signed by Lynn A. Williams | 148 |

INDEX.

v

Page.

| | |
|---|-----|
| Plaintiff's Exhibit No. 80—Escrow agreement between John L. Milton and Webster Electric Co., dated April 10, 1912 | 148 |
| Acceptance of escrow, signed by Lynn A. Williams | 150 |
| Assignment from John L. Milton to Lynn A. Williams, dated April 10, 1912..... | 151 |
| No. 81—Deposition of Frederick C. Manning—Wisconsin ex rel. Podlesak vs. Webster Electric Co. | 153 |
| Defendant's Exhibit 5—Assignment from trustees of Sumter Electrical Co. to Splittdorf Electrical Co., dated September 26, 1916..... | 217 |
| No. 82—Deposition of Harry R. Vandever—Wisconsin ex rel. Podlesak vs. Webster Electric Co. | 275 |
| Letter, May 20, 1917, Van Deventer to Reynolds | 312 |
| Letter, November 3, 1913, Webster Electrical Co. to Van Deventer..... | 314 |
| No. 83—Notice to Lynn A. Williams..... | 327 |
| Abstract of minutes of a special meeting of the board of directors of the Splittdorf Electrical Co., held December 9, 1916.... | 330 |
| Assignment from trustees of Sumter Electrical Co. to Splittdorf Electrical Co., dated September 26, 1916..... | 330 |
| Defendant's Exhibit No. 1—Waterman letter of February 16, 1909.... | 333 |
| No. 2—Letter, April 6, 1909, Waterman to Kane.. | 335 |
| No. 4—Letter, April 16, 1909, Webster to Milton.. | 337 |
| No. 15—Letter, April 22, 1909, Webster to Milton.. | 337 |
| No. 5A—Letter, May 1, 1909, Webster to Milton... | 338 |
| No. 10—Letter, May 1, 1909, Webster to Milton.... | 339 |
| No. 11—Letter, May 6, 1909, Webster to Milton... | 339 |
| No. 12—Letter, May 8, 1909, Webster to Milton... | 340 |
| No. 13—Letter, May 8, 1909, Webster to Milton... | 341 |
| No. 14—Letter, May 10, 1909, Milton to Webster... | 341 |
| No. 6—Letter, May 21, 1909, Milton to Webster... | 342 |
| No. 8—Letter, May 21, 1909, Webster to Milton.. | 343 |
| No. 7—Letter, May 22, 1909, Webster to Milton.. | 343 |
| No. 9—Letter, May 24, 1909, Milton to Webster... | 344 |
| No. 22—Letter, October 25, 1909, Webster to Milton | 345 |
| No. 22A—Letter, November 10, 1909, Milton to Couchman | 345 |
| No. 22B—Letter, November 10, 1909, to Webster.... | 346 |
| No. 30—Letter, September 10, 1910, Brown & Williams to Milton..... | 347 |
| Letter, September 29, 1910, Milton to Williams | 347 |

| | Page. |
|--|-------|
| Defendant's Exhibit No. 29—Letter, October 1, 1910, Williams to Milton | 347 |
| No. 39—Letter, October 10, 1910, Milton to Webster | 348 |
| No. 24—Letter, October 13, 1910, Williams to Milton | 348 |
| No. 25—Letter, October 13, 1910, Williams to Milton | 349 |
| No. 37—Letter, October 25, 1910, Williams to Milton | 350 |
| No. 34—Letter, December 3, 1910, Brown & Williams to Milton..... | 351 |
| No. 31—Letter, January 5, 1911, Brown & Williams to Milton..... | 351 |
| No. 32—Letter, February 7, 1911, Brown & Williams to Milton..... | 352 |
| No. 36—Letter, February 7, 1911, Williams to Milton | 352 |
| No. 38—Letter, February 8, 1911, to Webster..... | 353 |
| No. 35—Letter, February 9, 1911, Brown & Williams to Milton..... | 353 |
| No. 50—Letter, July 23, 1914, Loeb to Hood & Schley | 354 |
| No. 72—Letter, April 22, 1915, Williams to Podlesak | 354 |
| No. 41—Letter, November 19, 1915, Williams to Milton | 355 |
| No. 42—Letter, November 29, 1915, to Williams... | 356 |
| No. 40—Letter, June 2, 1916, Brown to Milton.... | 357 |
| No. 43—Letter, June 7, 1916, Milton to Brown.... | 357 |
| No. 44—Letter, September 11, 1916, Williams to Milton | 358 |
| No. 44A—Blank form: concession of priority..... | 359 |
| No. 44B—Letter, September 13, 1916, Motor Ignition & Devices Co. to Williams, Bradbury & See..... | 359 |
| No. 49—Certified photographic copy of the file-wrapper and contents in the matter of interference No. 39,013, Milton vs. Kane, subject-matter: magneto generator..... | 360 |
| No. 54—Certified photographic copy of the file-wrapper and contents in the matter of the letters patent of Edmund Joseph Kane, assignor to Webster Electric Co., No. 1,204,573..... | 500 |
| No. 55—Certified photographic copy of the file-wrapper and contents in the matter of the letters patent of Edmund Joseph Kane, assignor by mesne assignments to Webster Electric Co., No. 1,280,105..... | 622 |

1

PLAINTIFF'S EXHIBIT #1.

Milwaukee Works, March 15, 1909.
The Milton Magneto.

Experimental Department,
Harvester Building, Chicago.

Gentlemen:

After careful consideration of the principal features of the Milton magneto existing today, both as erected by us here at Milwaukee, and as now suggested by the Webster people for erection to permit direct operation without altering present design of engine,—we have reached the following conclusions:

The entire outfit is more heavy and more bulky in general form and construction than desirable, if not than necessary, the new igniter including bracket, weighing about 25 pounds. The Milton magneto equipped for operation as erected regularly at Milwaukee, has required a strain of about 25 pounds on cylinder-boss. The size of this boss cannot be altered without interfering with engine repairs. The new arrangement of magneto proposed to permit erection in the field with less difficulty, will require a strain of approximately 100 pounds on this same boss,—work too much for present system of attachment, a condition sure to give trouble from rough handling as well as from wear in reasonable use. The magneto when in place as at present designed, is not sufficiently rigid and is not sufficiently secure to stand up properly under conditions of continuous operation. Several parts are not so readily accessible as to permit reasonably accurate adjustment with ordinary tools at hand. Excessive weight of parts moving at high speed, when erected on small engines, results in a vibration so noticeable as to cause sparks to take place out of time,—with resulting wear to ignitor-points and frequent backfiring. In brief, although the improved Milton magneto as now suggested for use, can be installed in the field by an engine expert of reasonable ability in perhaps about one hour, we do not by any means consider this improved form entirely satisfactory for regular shipment. The Webster people should thoroughly overhaul the entire outfit, and they should correct troubles covered by these statements submitted above. It may possibly be satisfactory to continue shipment of the Milton magneto in accordance with present practice, but unless these unsatisfactory conditions are corrected, we have good reason to consider it necessary to ar-

range for some substitue for this magneto for use on our engines,—entirely on the ground of defects developed.

Yours very truly,

INTERNATIONAL HARVESTER COMPANY,
Milwaukee Works,

H. A. WATERMAN,
Superintendent.

PLAINTIFF'S EXHIBIT #2.

(Letterhead of Webster Mfg. Co.)

Dictated by T. K. W.—LK.

Chicago, April 29, 1909.

International Harvester Co.

Chicago, Ill.

Attention Mr A. E. Mayer,

Dear Mr. Mayer;

I enclose herewith protographs of the Harvester 6 HP engine, with the latest attachment, which we are sure will suit all interested in this proposition. As already stated, we have covered all the points of objection very properly registered by Mr. H. A. Waterman.

First, as regards the rigidity, we have attached the magneto now by two $\frac{3}{8}$ " bolts, which have an ultimate strain of 40000# and a safe working strain, (namely a factor of safety of 6), 3600# for the two bolts and we have only a strain of 35# against this. We are sure you will be satisfied on the point of rigidity.

Second, we control this with the exhaust rod so you only spark when there is a charge in the cylinder.

Third, We have made the magneto smaller, so we believe now that we have got exactly what we have all been working for.

I am going to New York this afternoon to be gone a week or ten days and I trust by the time I get back we can
3 settle this question so that we can get your orders in sufficient quantities to ship promptly and to put it on a manufacturing basis.

Will you kindly notify us, a month in advance, so that we may get the magneto on your boat in time for your requirements.

Yours very truly,

F. K. WEBSTER
Pres.

4

PLAINTIFF'S EXHIBIT #3.

Milwaukee Works, March 17, 1909.
The Milton Magneto.

Experimental Department,
Harvester Building, Chicago.

Mr. Edward H. Kimbark.

Dear Sir:

Replying to your letter of the 16th of March.—In line with my statements in my letter to you of the 15th of March,—from what we have been able to learn at this plant, we hardly think it will be wise for us to push the Milton magneto, particularly for installation in the field, as at present designed.

Yours very truly,

INTERNATIONAL HARVESTER COMPANY,
MILWAUKEE WORKS,

H. A. WATERMAN,
Superintendent.

HAW-G

Copy to Mr. Mayer.

5

PLAINTIFF'S EXHIBIT NO. 4.

Milwaukee Works, June 11, 1909.
The Milton Magneto.

Experimental Department,
Harvester Building, Chicago.

Gentlemen:

The improved Milton magneto recently received, attached permanently to the ignitor-plug, has for sometime been in operation on a 6-HP engine. It is different in all of its parts from the magnetos we have regularly been receiving from the Webster Manufacturing Company, and these alterations submitted, overcome reasonably well, important objections raised by us in our letter to you of the 15th of March. The new magneto complete weighs about eighteen pounds, as against about thirty-two pounds for the old one. The magnets are shorter, the rotor is half an inch less in diameter, the springs are fastened to posts set into pole pieces, and the hole in the center brass casting supporting magneto proper, is half an inch smaller in diameter. The magneto as now presented seems to work well, and except for the fact apparatus of this nature is rather delicate when continuously exposed to dust and moisture, we see no reason why it should

not prove reasonably satisfactory, electrically and mechanically.

Because we already have seven different designs of ignitor-plugs for make-and-break engines, not including those of the new side-shaft engine,—if we are to purchase these new magnetos from the Webster Company, we should not have the ignitor-plug included as part of their product. By having them omit this plug, we shall be able to avoid the necessity for carrying in stock a larger number of magnetos than would be required if we purchased from the Webster people the magneto complete, including plug and bracket. The new-line side-shaft engine apparently without changing its design, will not permit the use of a magneto made as part of the ignitor-plug. This gives an additional reason for not having these magnetos furnished with the plugs as part of the magnetos proper.

It will of course be necessary for the Webster Company to continue making repair parts for the older style magnetos.

6 Because this new magneto certainly is an improvement over the older one, we recommend that our present order of these older magnetos be completed and delivered to us at a uniform rate per week before the 15th of August; that one dozen of these new type magnetos be delivered to us immediately, regular relivery of these new ones, including only magnets with coils, the rotor, the trip-finger and the springs for the trip-finger, to begin on the 15th of August at the rate of about fifty per week, this number then to be regulated by demands for shipment of engines thus equipped.

If this program can be followed, we will begin to make use of these new magnetos on the 1st of September,—decisions to be submitted accordingly.

Yours very truly,

INTERNATIONAL HARVESTER COMPANY.

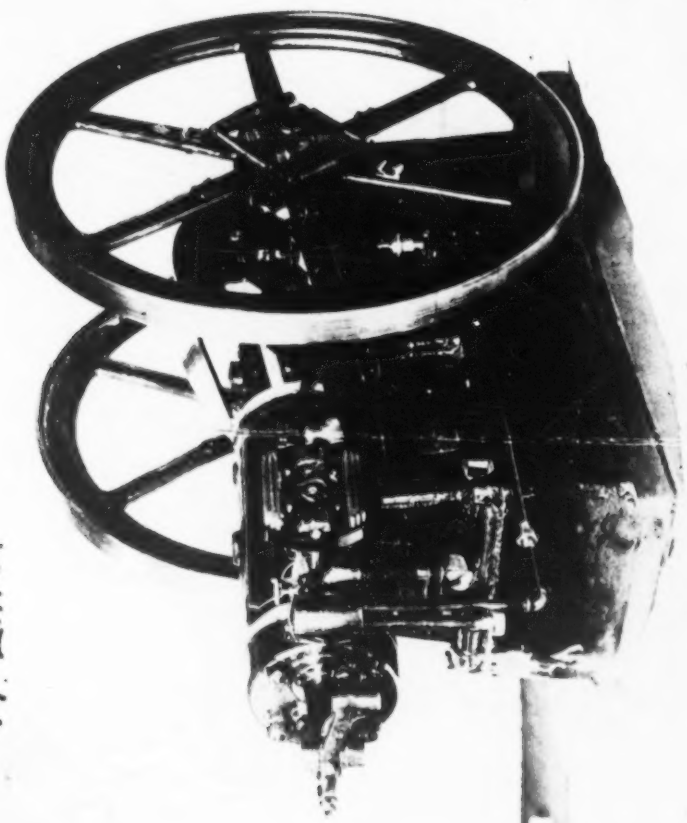
MILWAUKEE WORKS

H. A. WATERMAN,

Superintendent.

HAW-G

Ref. 5.



8

PLAINTIFF'S EXHIBIT NO. 6.

Decision Recording Change in Design or Material
Milwaukee Works Date August 30, 1909. Decision No. D-259.
Machine affected All Engines with Make-and-Break Ignition.
Principal parts affected Milton Magneto.

It has been decided to furnish the new circular, type D-2
Milton magneto attached to ignitor plug, for all vertical and
horizontal engines having make-and-break ignition, including
Junior, 2-, 3-, 6- and 25 HP vertical, 2-, 3-, 5- and 6 HP Non-
pareil, and 2½-, 4-, 6-, 8-, 10-, 12-, 15-, 20- and 25 HP horizontal
engines.

This magneto can be furnished on special order for above
engines for Foreign shipment after September 1, 1909, and
can be placed on engines now in the field.

Photo M-575 shows magneto complete.

Photo M-576 shows magneto in starting position.

Photo M-577 shows magneto in running position.

Photo M-578 shows magneto complete, attached to 10 HP
horizontal engine.

Recommended by International Harvester Company, Mil-
waukee Works,

Concurred in by H. A. Waterman

Approved by W. A. Cavanaugh

Date Sept 21-09

9

PLAINTIFF'S EXHIBIT NO. 7.

(Letterhead of Engineers, Founders & Machinists.)
Dictated by T. K. W.—LK.

Chicago, June 3, 1909.

Mr W. A. Cavanagh,
Harvester Bldg.
City.

Dear Mr Cavanagh;

(Milton Magneto)

Mr Joe Kane went over to the Deering Works and took the
measurements for the 15 HP engine and we have completed
the drawings. We will be able to put the magneto on nicely
and yet not interfere at all with the change speed device. We

will proceed at once to get out the patterns and rush the work as rapidly as possible.

Yours very truly,

WEBSTER M'F'G Co.

T. K. WEBSTER.

X

PLAINTIFF'S EXHIBIT NO. 8.

7; Milton Magneto:—The committee were shown a modified form of the Milton magneto. The improved magneto is attached more firmly to the cylinder than the one now used. It is attached by means of the two bolts which attach the ignitor. Also, the magneto does not operate when the engine cuts out. Mr. Waterman advised that he would like to run this improved form two or three weeks before passing upon it, and it was decided that this should be done, before we undertake to put out this type of magneto in quantities.

PLAINTIFF'S EXHIBIT NO. 9.

Milwaukee Works, May 26, 1909.

Milton Magneto.

Mr. W. A. Cavanaugh, Manager,
Experimental Department,
Harvester Building, Chicago.

Dear Sir:—

Replying to your letter of May 17th.

As outlined in the new works committee report #176, Mr. Waterman has arranged to run the Milton mageto which Mr. Kane left at this works for a period of two or three weeks. At completion of this test, we will make report covering magnetos to date.

Yours truly,

INTERNATIONAL HARVESTER COMPANY
Milwaukee Works.

H. A. WATERMAN,

Superintendent.

By

HAW
LCB—W

12

PLAINTIFF'S EXHIBIT NO. 10.

For Department and Interdepartment
Use Only
Experimental Department

May 6th, 1909

Mr. A. E. Mayer,
Division Manager,
Office,

Milton Magneto

Dear Sir:—

Referring to letter of the Webster Mfg. Co. of April 29th, Mr. Kane looked over this new method of attachment on the 4th and it looks to be an improvement over that previously used. He has arranged with the Webster Mfg. Co. to send one of these magnetos to Milwaukee for a test as soon as they can build up a second one. The new method of attachment refers to the attaching of a magneto to the spark plug bolts. The magneto also cuts out with the engine.

Yours very truly,

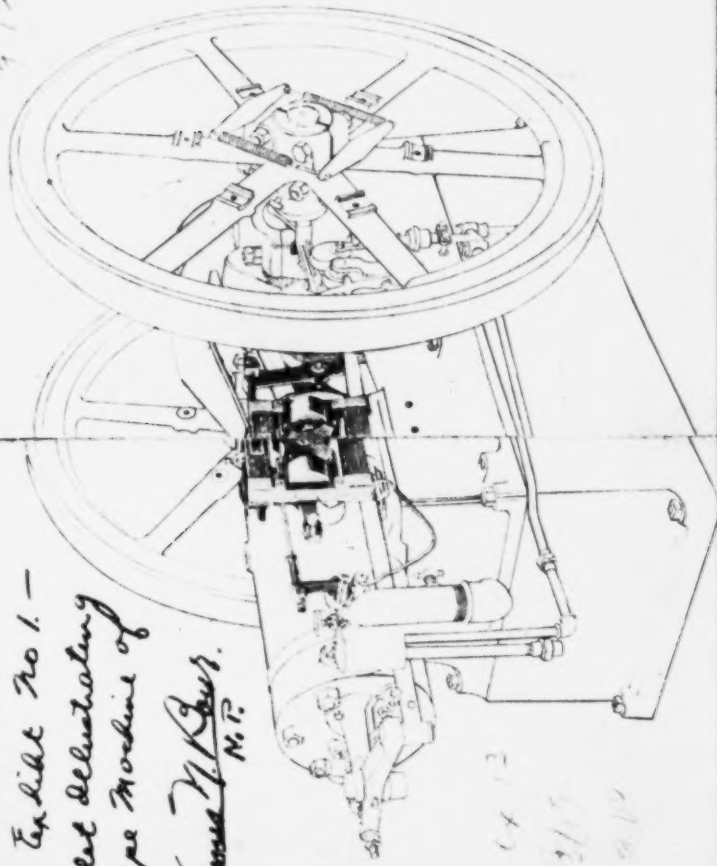
EDWARD H. KIMBARK

Copy sent to H A Waterman, Milwaukee Works



United States Patent Office
In re Invention No. 39,013
Milton Kane

Kane Exhibit No. 1 -
Pamphlet illustrating
Link Type Machine of
1904 -
James H. Kane
N.Y.



MILTON MAGNETOS

B-PMS

For Stationary and Portable
Gas, Gasoline, Oil and
Alcohol Engines

No Battery Needed to Help
Start the Engine

Milton Magnetos Give Entire Satisfaction Independent of Batteries



MILTON magnetos have no moving armatures, commutator, brushes, collector or slip rings, no moving wire or moving insulation. The shaft carries a small inductor made up of sheet steel stampings. There is nothing about them that can wear out.

This magneto generates a pulsating, alternating current to be used for low and high tension ignition systems, and is available for stationary and portable engines using gas, gasoline, kerosene or alcohol.

No Battery Needed to Help Start the Engine

Pull the engine around a half turn over the compression and the magneto will generate a spark to explode the charge.

Further, the spark does not increase in proportion as the speed of the engine increases. It will not burn out ignitor points.

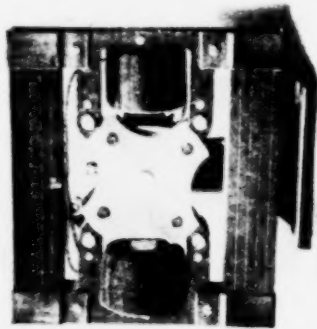
The contact of a low tension magneto produces a fat, hot spark anywhere throughout an arc of 45 degrees, and will take care of the advance and retard position of ignition.

These magnetos are always at their highest efficiency. The current is taken off in such a manner that

They are constantly building up their magnetic fields.

The permanent magnets can never become demagnetized. This is a unique feature of these

magnetos. In other types of magneto-electric machines, where the wires are moving or where they are not wound on extensions of the pole pieces, there is a counter electro motive force all through the period of generation, which has a demagnetizing influence against the field magnets and which so weakens them that in time the ignition will fail. In Milton magnetos two groups of permanent magnet steel bars furnish magnetism



This Milton Magneto operates at half the engine speed.

for the magnetic field, which flows through the divided, soft steel pole pieces in one general direction. These magnets are made by bringing them under the influence of a magnetic field. This could be done after the magnet is assembled by sending a current through the coils on the pole pieces of the machine. If a current is sent through these coils in one direction it furnishes magnetism for a given direction of magnetic flow. If the current is reversed in the coils, it will give

the reverse effect on the fields, or cause the magnetism to flow in the opposite direction. The projections and the windings are so connected that as the inductor oscillates it shifts the magnetism from one protection to another and in and out of the windings. As the magnetism flows into the coil, it generates a negative wave of current, and as it flows out, it generates a positive wave of current, this being the law of alternating current. The latter has a magnetizing effect on the permanent magnets and the former a demagnetizing effect. The magneto parts are so arranged that the positive or magnetizing current is used and the demagnetizing current allowed to pass unused. Therefore, the general tendency of the machine is to continuously build up its magnetic strength to its maximum point, which is called saturation.

The use of straight bar magnets affords a process of manufacture and magnetizing not practical with horse shoe magnets. These magnets are not heated to be shaped and their grain is maintained just as they leave the rolls. This molecular arrangement is a necessary function of an absolutely permanent magnet.

Dust or dampness do not effect them. The coils are thoroughly waterproofed and they will work in the rain just as well as under shelter. They are not even affected in the smallest degree by a continuous drenching with buckets of water or oil.

They are so simple that there is nothing about them to go wrong. They need no adjustment.

This attachment is furnished on special order with 4, 6, 8, 10, 12, 15 and 20-horse power stationary and portable horizontal engines.

PRESERVE THIS PAMPHLET FOR FUTURE REFERENCE

Directions for Attaching
THE
"MILTON MAGNETO"
TO THE
International Harvester Company's
HORIZONTAL GASOLINE ENGINES

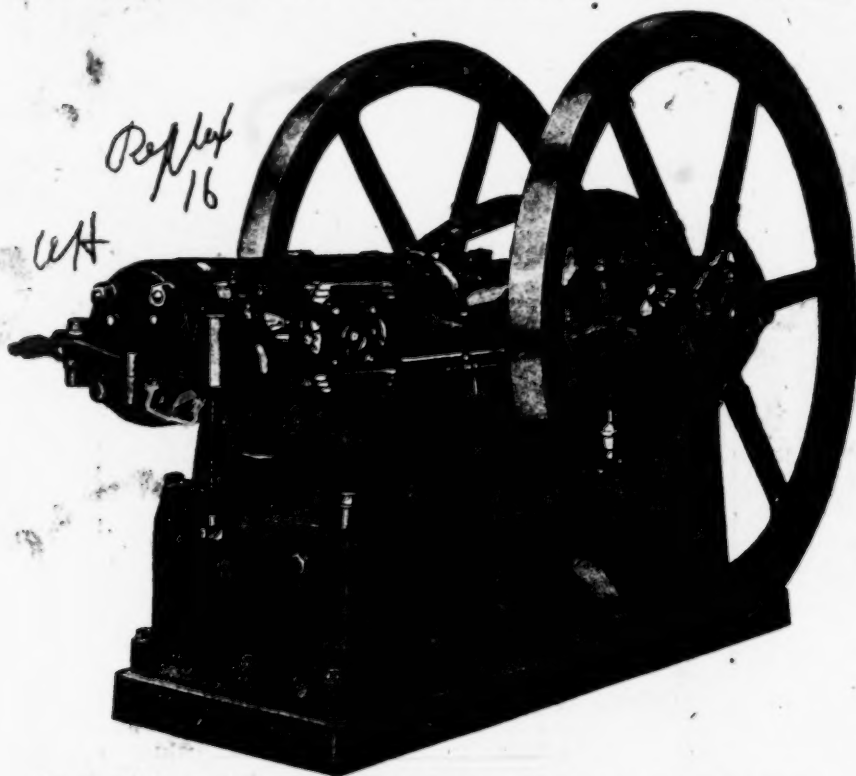


Illustration No. 1—6-Horse Power I. H. C. Gasoline Engine Equipped with Magneto

International Harvester Company of America
(Incorporated)

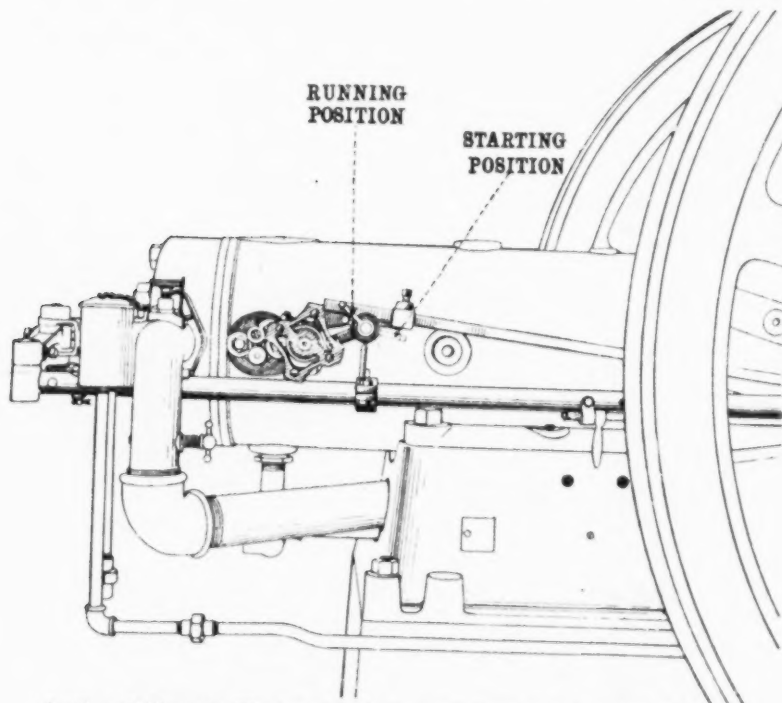
CHICAGO, U. S. A.

INTERNATIONAL PUMP SHOP, CHICAGO, U. S. A.

Instructions for Attaching the Milton Magneto to the International Harvester Company's Horizontal Gasoline Engines

First, remove the igniter trip rod; then remove igniter roller and take set screw out of the boss. Remove igniter plug and clean the old casket off the boss on cylinder.

The magneto bracket and igniter plug are in one piece. Put the igniter plug part of the magneto in place where the igniter was, and screw up the nuts with the special wrench which comes with the magneto. Then put the magneto push rod in place where the igniter push rod was. Turn the



Section of Magneto Illustrated, Showing Starting and Running Positions

engine so that the eccentric is as far away from the cylinder as it will go. Then adjust magneto push rod so that the distance between it and the trip finger is about $\frac{1}{8}$ ". (See Figure 1.) See that the lever which carries the roller is in the position marked "start." (See Illustration 4.) Then turn the engine over until it is at the end of the compression stroke. Then push the magneto trip forward (see Figure 2), until the magneto push finger trips off. Fasten the trip in this position.

This will be the position for starting the engine. When the spark advance handle is moved to the run position, the push finger should trip about 30 degrees before the crank of the engine reaches the end of the compression stroke. (See Illustration No. 5.)

The inductor must work freely between pole pieces. There should be air gaps or clearance between them. Be careful that no iron filings or chips get in here.

The igniter points are held together at all times, except at time of spark. There is a special wrench supplied with magneto for putting the

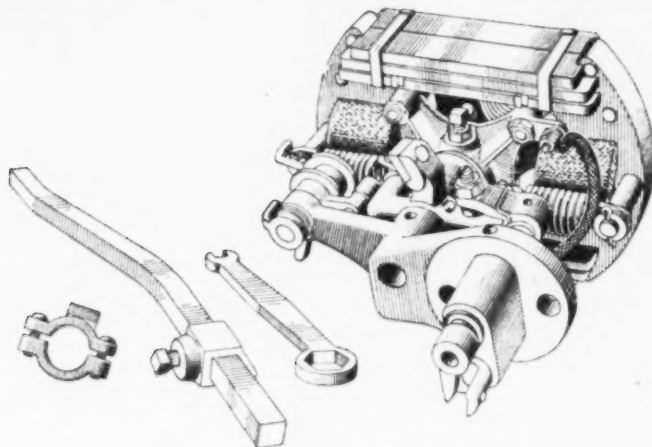


Illustration No. 6

magneto on the engine. Hang this up so that you will always have it, as it is difficult to take igniter off without it. (See Illustration No. 6.)

* Oil or water do not affect the magneto.

Never take the magneto apart if it does not operate properly. Read the instructions over again very carefully and you will find the trouble and remedy it.

TRADE



MARK

United States Patent Office

In re Interference No. 34013 - Milton & Kane

*Kane's Exhibit No 2. - Pamphlet Illustrating
Self-Contained Construction of 220 V.*

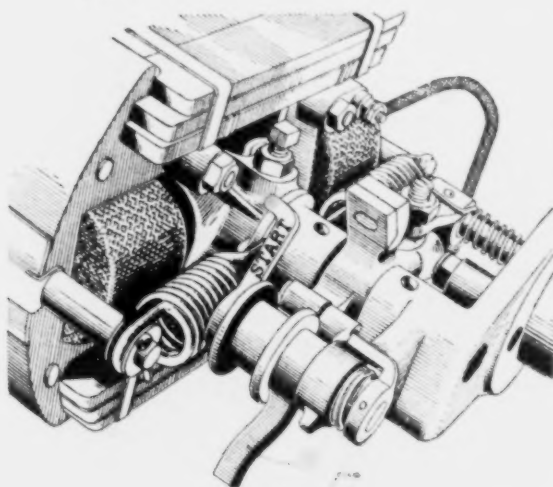


Illustration No. 4

TO ADJUST MAGNETO CUT-OUT

Fasten the small clamp, which bumps the magneto push rod lifter, to the exhaust rod. (See Figure 1.) Adjust this clamp so that when the detent is holding the exhaust valve open, it holds the magneto push rod "A" lifter so that the magneto push rod will not engage the magneto trip finger "B".

TIMING

Hold the inductor over against the springs to the position shown in Figure 3. The corner "E" of inductor will then just be

leaving corner "G" of the pole piece. Then adjust the screw in the movable electrode, so that the igniter points are just separated. This adjustment must be maintained.

TO TEST FOR SPARK

Hold the magneto wire against movable electrode when the trip finger is tripped. When the trip finger hits the movable electrode, there should be a bright spark between the wire and the electrode. If there is no spark, the failure may be due to two things. First, the magneto may be turned wrong. (See Figure 3.) Second, it is necessary that the wire should be so held, that, when the igniter points separate, the movable electrode is jerked away from the wire.

If the engine refuses to start, or misses fire, see that the movable electrode works freely.

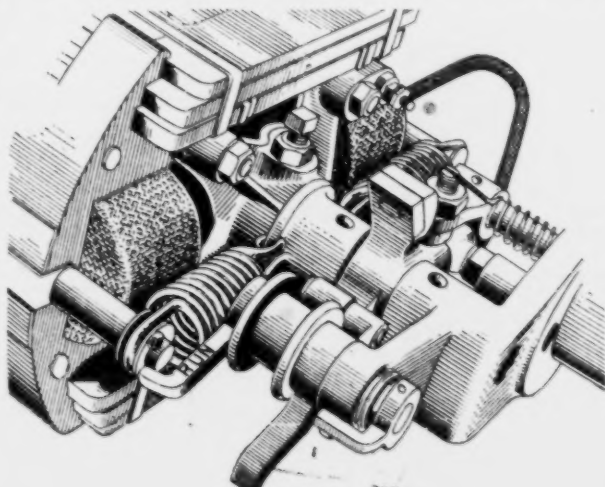


Illustration No. 5

Make sure that the wire connecting the insulated electrode of igniter and the binding part of the magneto is in good condition.

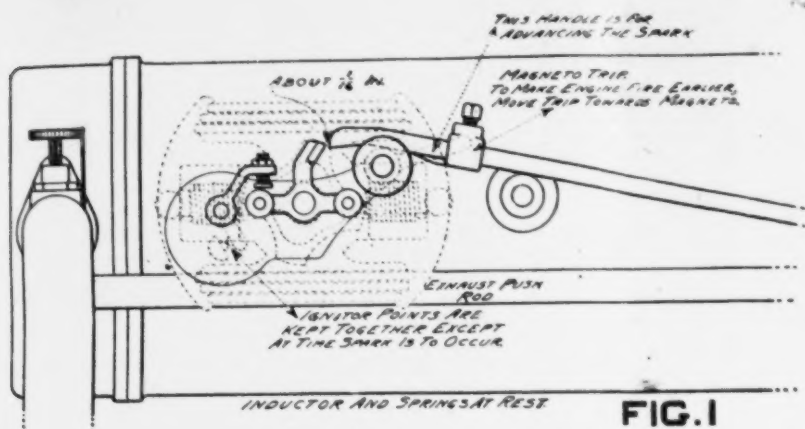


FIG. 1

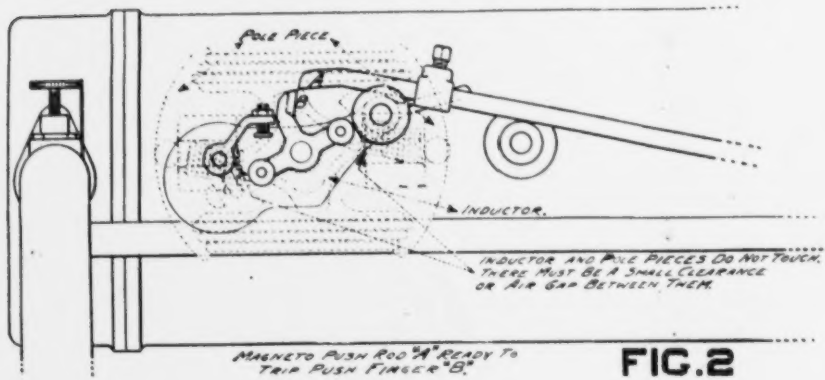


FIG. 2

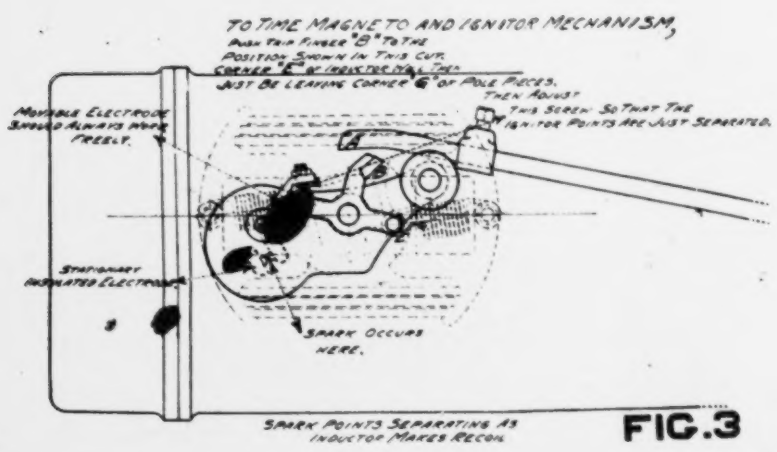


FIG. 3

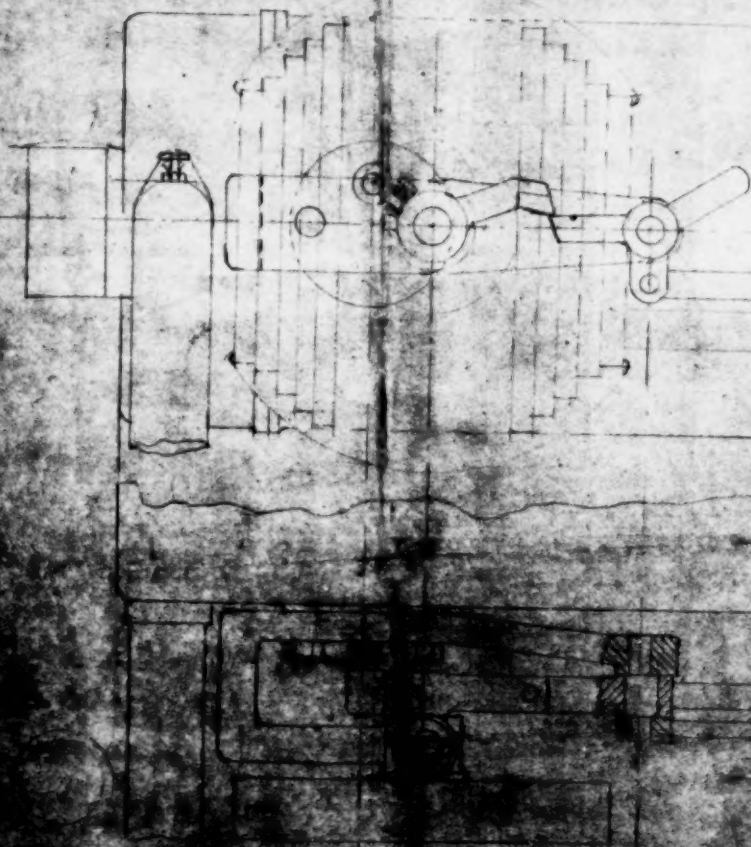
PRICE LIST OF REPAIR PARTS

FOR ATTACHING THE

Milton Magneto to the I. H. Co's Horizontal Gasoline Engines

| DESCRIPTION | Cat. No. | Price List | | | | | | |
|--|----------|------------|--------|--------|---------|---------|---------|---------|
| | | 4-H.P. | 6-H.P. | 8-H.P. | 10-H.P. | 12-H.P. | 15-H.P. | 20-H.P. |
| Magneto trip rod, $\frac{1}{4}$ " sq. x 40 $\frac{1}{2}$ " | G 53904 | | | | | | | \$1 00 |
| Magneto trip rod roller, 1 $\frac{1}{8}$ " rd x 1 $\frac{1}{8}$ " | G 5652 | | | | | \$0 35 | \$0 35 | 35 |
| Magneto trip rod, $\frac{1}{4}$ " sq. x 38 $\frac{1}{2}$ " | G 56544 | | | | | | 85 | |
| Movable electrode | G 5854 | | | | | 1 25 | 1 25 | 1 25 |
| Igniter finger | G 5855 | | | | | 45 | 45 | 45 |
| Igniter finger spring | G 5856 | | | | | 20 | 20 | 20 |
| Magneto trip rod, $\frac{1}{4}$ " sq. x 31 $\frac{1}{2}$ " | G 58574 | | | | | 65 | | |
| Magneto trip rod lifter, complete | G 7286 | \$0 40 | | | | | | |
| Magneto bracket and igniter frame (complete, \$7 25) | G 7287 | 2 25 | | | | | | |
| Lower half of exhaust rod clamp | G 7288 | 10 | | | | | | |
| Upper half of exhaust rod clamp | G 7289 | 10 | | | | | | |
| Lower half of exhaust rod clamp | G 7381 | | \$0 10 | | | | | |
| Upper half of exhaust rod clamp | G 7382 | | 10 | | | | | |
| Magneto trip rod lifter, complete | G 7388 | | 40 | | | | | |
| Magneto bracket and igniter frame (complete, \$7 50) | G 7384 | | 2 25 | \$2 25 | \$2 25 | | | |
| Magneto trip rod lifter, complete | G 7387 | | | 45 | 45 | | | |
| Upper half of exhaust rod clamp | G 7388 | | | 10 | 10 | 10 | | |
| Lower half of exhaust rod clamp | G 7389 | | | 10 | 10 | 10 | | |
| Magneto trip rod lifter, complete | G 7407 | | | | | 45 | | |
| Magneto bracket and igniter frame (complete, \$7 75) | G 7408 | | | | | 2 50 | 2 50 | 2 50 |
| Magneto trip rod lifter, complete | G 7412 | | | | | 50 | | |
| Outer half of exhaust rod clamp | G 7415 | | | | | | | 10 |
| Inner half of exhaust rod clamp | G 7416 | | | | | | | 10 |
| Magneto trip rod lifter, complete | G 7417 | | | | | | | 50 |
| Outer half of exhaust rod clamp | G 7424 | | | | | | 10 | |
| Inner half of exhaust rod clamp | G 7425 | | | | | | 10 | |
| Magneto trip rod roller, 1E" rd. x 1 $\frac{1}{2}$ " | G 8918 | 30 | 30 | 30 | 30 | | | |
| Magneto trip rod roller shifter stud, $\frac{1}{8}$ " rd x 2 $\frac{1}{8}$ " | G 8919 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Adjusting screw, $\frac{1}{4}$ " rd. x 1" | G 8921 | 10 | 10 | 10 | 10 | 10 | 10 | 10 |
| Igniter finger spring | G 8923 | 20 | 20 | 20 | 20 | | | |
| Movable electrode | G 8926 | 1 00 | | | | | | |
| Magneto trip roller shifter stud collar | G 8928 | 15 | 15 | 15 | 15 | 15 | 15 | 15 |
| Igniter finger | G 8930 | 45 | 45 | 45 | 45 | | | |
| Magneto trip roller shifter spring | G 8931 | 05 | 05 | 05 | 05 | 05 | 05 | 05 |
| Magneto trip rod roller shifter | G 8933 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| Magneto trip rod, $\frac{1}{4}$ " sq. x 15 $\frac{1}{2}$ " | G 89344 | 35 | | | | | | |
| Magneto trip rod, $\frac{1}{4}$ " sq. x 22" | G 90294 | | 45 | | | | | |
| Movable electrode | G 9030 | | 1 25 | 1 25 | 1 25 | | | |
| Magneto trip rod, $\frac{1}{4}$ " sq. x 25 $\frac{1}{2}$ " | G 90314 | | | 50 | | | | |
| Magneto trip rod, $\frac{1}{4}$ " sq. x 28 $\frac{1}{2}$ " | G 90324 | | | | 60 | | | |
| Additional Parts Required for Attaching Magneto to Engines when in the Field | | | | | | | | |
| Cam gear | GA 400 | | | 3 40 | | | | |
| Cam gear | GA 490 | | | | 3 40 | | | |

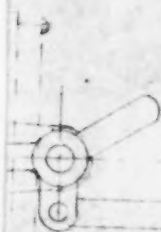




27
The distance of the
of the road to the station

from the station to the
of the road to the station

Map of the
of the road to the station



EXANE
APRIL 11/1900



62

BILL OF COMPLAINT.

Filed August 21, 1915.

UNITED STATES DISTRICT COURT

Eastern District of South Carolina.

| | |
|---|--|
| Emil Podlesak, Henry J. Podlesak and Webster Electric Company, <i>Plaintiffs,</i> | } In Equity No. Letters Patent Re- issue No. 13,878. |
| —vs— Sumter Electrical Company, <i>Defendant.</i> | |

Bill of Complaint.

To the Honorable Judges of the District Court of the United States, in and for the Eastern District of South Carolina:—

Emil Podlesak, a citizen of the United States, and a resident of Racine, Racine County, Wisconsin, Henry J. Podlesak, a citizen of the United States and a resident of Chicago, Cook County, Illinois, and the Webster Electric Company, a corporation organized and existing under and by virtue of the laws of the State of West Virginia, having its principal place of business at Racine, in the County of Racine and State of Wisconsin, bring this their Bill of Complaint against the Sumter Electrical Company, a corporation organized and existing under and by virtue of the laws of the State of South Carolina and having its principal place of business at Sumter, in the County of Sumter, and State of South Carolina, within the Eastern District of South Carolina; and thereupon your orators complain and say:

63

I.

That heretofore and before the 15th day of April, A. D. 1912, your orator, Emil Podlesak, then a resident of Tiffin, in the County of Seneca, and State of Ohio, was the original, first and sole inventor of a certain new and useful improvement in Current Generator and Igniter for Internal Combustion Engines, fully described in the specifications of the hereinafter mentioned Letters Patent, which invention was not known or used by others in this country or patented or described in any printed publications in this or any foreign

country prior to his invention thereof or more than two years prior to his application for said Letters Patent, had not been in public use or on sale in this country for more than two years prior to said application, had not been abandoned to the public and had not been patented or caused to be patented by him or his legal representatives or assigns in any foreign country upon an application filed more than twelve (12) months prior to the filing of his application for Letters Patent of the United States; that your orator, Emil Podlesak, made due application to the Commissioner of Patents of the United States in accordance with the then existing Acts of Congress, for Letters Patent of the United States for said invention and improvement.

Your orator, Emil Podlesak, having in all respects complied with the conditions and requirements of the said Acts of Congress, on the 14th day of March, A. D. 1913, Letters Patent of the United States No. 1,055,076, signed, sealed and executed in due form of law for the said invention and improvement, were issued and delivered unto your orator, 64 Emil Podlesak, whereby there was granted unto him, the said Emil Podlesak, his heirs and assigns, the sole and exclusive right to make, use and vend the invention set forth, described and claimed therein, for the term of seventeen (17) years from the 4th day of March, A. D. 1913, throughout the United States, and the territories thereof. A printed copy of said patent No. 1,055,076, is hereunto annexed and made a part of this Bill of Complaint.

II.

That the aforesaid Letters Patent No. 1,055,076 were inoperative by reason of a defective and insufficient specification, to fully secure to your orator, Emil Podlesak, the aforesaid invention and improvement, which was described in said Letters Patent and intended to be secured thereby, and that the error in said Letters Patent rendering the same in operative, as aforesaid, arose by inadvertence, accident and mistake, and without any fraudulent or deceptive function on the part of your orator, Emil Podlesak, and that on account of the defects and insufficiencies of said Letters Patent, your orator, Emil Podlesak, made application to the Commissioner of Patents, in accordance with the then existing Acts of Congress, for leave to surrender the said Letters Patent and for the grant to him of new Letters Patent for the same invention in accordance with the amended specifications presented

with said application, and for the unexpired part of the terms of said original Letters Patent, and that thereupon having fully complied with all the conditions and requirements of said Acts of Congress and having paid the fee required by law, leave to surrender said original Letters Patent
65 was duly granted by the Commissioner of Patents, and on the 9th day of February, A. D. 1915, new and re-issued Letters Patent for the same invention and improvement, bearing No. 13,878, signed, sealed and executed in due form of law were issued and delivered unto your orator, Emil Podlesak, for the unexpired term of said original Letters Patent, whereby there was secured unto your orator, this heirs and assigns, for said unexpired term of said original Letters Patent, to-wit: until the expiration of the term of seventeen (17) years from the 4th day of March, A. D. 1913, the sole and exclusive right to make, use and vend throughout the United States and territories thereof, the aforesaid invention and improvement. A printed copy of said reissue Patent No. 13,878 is hereunto annexed and made a part of this, Bill of Complaint.

III.

That heretofore, by instruments in writing duly signed and delivered, the said Emil Podlesak, one of your orators, sold, assigned, and transferred unto Henry J. Podlesak, another of your orators, an undivided interest in the invention disclosed in said reissued Letters Patent No. 13,878, and thereafter said Emil Podlesak and Henry J. Podlesak, by instruments in writing duly executed and delivered, granted unto the said Webster Electric Company a license to make, use and sell the invention described in said reissued Letters Patent No. 13,878, and that your orators are now the sole and exclusive owners of said Letters Patent and are entitled to all of the rights and privileges granted and secured or intended to be granted and secured thereby, and are entitled to all the benefits, damages and moneys that may be recovered
for the infringement or violation of said reissued Letters
66 Patent. Proffer is made of said instruments in writing, to be produced in Court when necessary.

IV.

Your orators further say unto your Honors that the Sumter Electrical Company, well knowing the premises and the rights of your orators, with the intent of injuring your ora-

tors and to deprive them of the privileges and advantages which might and otherwise would accrue unto them from their rights in and to said reissued Letters Patent No. 13,878, has within six (6) years prior to the filing of this Bill, since February 9th, 1915, and before the commencement of this suit, unlawfully and without license or allowance by, and against the will of your orators and in infringement of their rights as set forth by said reissued Letters Patent No. 13,878, made, used and sold in the Eastern District of South Carolina and elsewhere in the United States, a Current Generator and Igniter for Internal Combustion Engines constructed in accordance with the disclosures of said reissued Letters Patent No. 13,878, and embodying the invention and improvements set forth, described and claimed therein, and that said Sumter Electrical Company is now continuing so to do and is preparing and threatening so to do in the future, and is preparing, aiding and encouraging others so to do within the Eastern District of South Carolina and elsewhere in the United States, and though requested and warned of your orators' rights in the premises and requested to abstain from and cease its infringing acts and operations, said defendant has disregarded such notices and warnings and has refused to cease its infringing and unauthorized acts, all of which is contrary to equity and good conscience and in 67 violation of your orators' rights, as stated; and, further, that but for said defendant's unlawful and unauthorized acts your orators would still be in the undisturbed possession, use and enjoyment of the exclusive privileges secured to them as owners of said reissued Letters Patent No. 13,878, and in receipt of the profits accruing therefrom, all of which works great and irreparable injury to your orators and to their rights in the premises.

V.

To the end, therefore, that said Sumter Electrical Company may, if it can, show reason why your orators should not have relief, may it please your Honors to bring said defendant, the Sumter Electrical Company, before this Court by process of subpoena, there to make full, true, direct and perfect answer to the certain matters and things herein set forth and charged (though not under oath, same being hereby expressly waived), and that it be decreed to account for and pay over to your orators the income and profits thus unlawfully derived and which might and would otherwise

have been accrued by your orators but for the unlawful and unauthorized acts of said Sumter Electrical Company and that said Sumter Electrical Company be required to produce its full records and accounts of all kinds touching upon and concerning its unlawful and unauthorized acts for the guidance of the Court in determining the amount justly due to your orators in consequence thereof; and, further, that said Sumter Electrical Company may be restrained from any further violation of your orators' rights in the premises, may it please your Honors to grant a writ of injunction issuing from and under the seal of this Honorable Court, perpetually enjoining and restraining said Sumter Electrical Company, its officers, employees, attorneys, agents and representatives of every kind and grade from further manufacture, use or sale in any manner or attempts thereat, or offers, negotiations or encouragements theretowards, in violation of your orators' rights as aforesaid; and for the further protection of their rights, your orators pray that a provisional or temporary injunction be issued, restraining said Sumter Electrical Company, its officers, employees, attorneys, agents or representatives of every kind and grade, from any further infringement of said reissued Letters Patent No. 13,878, pending this cause, and your orators further pray for such other relief as the equities of the case may require and to your Honors may seem meet.

And your orators will ever pray, etc.

(Signed) EMIL PODLESAK

HENRY J. PODLESAK

WEBSTER ELECTRIC COMPANY,

by WALTER BROWN

Vice-President.

SMYTHE & VISANSKA

LYNN A. WILLIAMS,

Solicitors for Plaintiffs.

69 United States of America }
State of Illinois } ss:
County of Cook }

EMIL PODLESAK, being first duly sworn, on oath deposes and says:

That he is one of the plaintiffs named in the foregoing Bill of Complaint; that he has read the foregoing Bill of Complaint subscribed by him, and knows the contents thereof;

that the same is true of his own knowledge, except as to the matters therein stated to be on information and belief, and as to those he believes it to be true; and that he verily believes that he was the true, original, first and sole inventor of the invention described in the patent referred to in the said Bill.

(Signed) EMIL PODLESAK

Subscribed and sworn to before me this 3rd day of August, A. D. 1915.

(Signed) ALBERT G. MCCALED

(Seal)

Notary Public.

70

SUBPOENA AD RESPONDENDUM.
THE UNITED STATES OF AMERICA,

Eastern District of South Carolina.

In the District Court.

| | |
|---|--------------|
| Emil Podlesak, Henry J. Podlesak & Webster Electric Company, <i>Plaintiffs,</i> | } In Equity. |
| <i>versus</i> | |
| Sumter Electrical Company, <i>Defendant.</i> | |

The President of the United States of America: To Sumter Electrical Company.

You are hereby summoned and required to answer the Bill herein, and to file a copy of your answer or other defense in the Clerk's office twenty days after the service hereof, exclusive of the day of service; and if you fail to answer this Bill within the time aforesaid, the Complainant in this suit will apply to the Court for the relief demanded in the Bill.

Witness, the Honorable Henry A. M. Smith, United States Judge for South Carolina, at Charleston, S. C., this 5th day of August, A. D. 1915.

LYNN A. WILLIAMS,
SMYTHE & VISANSKA,
Complainant's Solicitors.

RICHARD W. HUTSON,
C. D. C. U. S. E. D. S. C.

MEMORANDUM

The Respondent will take notice that he should file his answer or other defense to the Bill herein on or before the twentieth day after the service hereof, exclusive of the day of service; otherwise judgment pro confesso will be taken against him.

RICHARD W. HUTSON,
C. D. C. U. S. E. D. S. C.

(Endorsed) United States of America, Eastern District of South Carolina In the District Court. Emil Podlesak, Henry J. Podlesak & Webster Electric Co. Complainants versus Sumter Electrical Co. Defendants Subpoena ad Respondendum Filed Aug. 21, 1915 Richard W. Hutson C. D. C. U. S. S. C.

71 RETURN ON SERVICE OF WRIT.

United States of America, }
Eastern District of S. C. } ss:

I hereby certify and return that I served the annexed Sub. Ad. Re. on the therein-named Sumter Electrical Co., by handing to and leaving a true and correct copy thereof with C. F. Mason, Manager of the Company, at his office, personally at Sumter in said District on the 25th day of August, A. D. 1915.

JAS. L. SIMS,
U. S. Marshal.

72

UNITED STATES DISTRICT COURT

For the Eastern District of South Carolina

| | |
|---|--------------|
| Emil Podlesak, Henry J. Podlesak and Webster Electric Company, | } Notice. |
| <i>Plaintiffs,</i> | |
| <i>versus</i> | |
| Sumter Electrical Company, | } Defendant. |
| <i>Defendant.</i> | |

To Messrs. Smythe & Visanska, Complainant's Attorneys:

Please Take Notice, That the order of the Honorable H. A. M. Smith, District Judge for the Eastern District of South Carolina, of the District Court of the United States, has this day been filed in the said Court, extending the time to answer the Bill of Complaint in the above stated case, ten (10) days from the date of the Order, a copy of which Order and of the moving papers is hereto attached, and herewith served upon you.

(Signed) HARMON D. MOISE
Solicitor for the Sumter Electrical Company.

73

UNITED STATES DISTRICT COURT

For the Eastern District of South Carolina.

| | |
|---|--------------|
| Emil Podlesak, Henry J. Podlesak and Webster Electric Company, | } Order. |
| <i>Plaintiffs,</i> | |
| <i>vs.</i> | |
| Sumter Electrical Company, | } Defendant. |
| <i>Defendant.</i> | |

This is a motion made before me, Ex Parte, to extend the time within which the defendant shall answer the Bill of Complaint herein.

Upon reading and considering the facts stated in the foregoing petition,

It Is Ordered: That the time for answering of the defendant herein be extended ten (10) days from the date of this Order.

(Signed) HENRY A. M. SMITH
U. S. Dist. Judge.
14 Sept. 1915.

74

Copy

RETURN ON SERVICE OF WRIT

United States of America } ss:
Eastn. District of So. Ca. }

Sumter Electrical Co. }
vs. }
Podlesak *et al.* }

I hereby certify that I served the annexed Notice and Order on the therein-named Smythe & Visanska, Attorneys-at-Law, by handing to and leaving a true and correct copy thereof with A. T. Smythe, Esq., member of the firm of Smythe & Visanska, personally at Charleston, in said District on the 14th day of September, 1915.

JAS. L. SIMS,
U. S. Marshal
By N. M. PORTER,
Deputy.

75

UNITED STATES DISTRICT COURT

For the Eastern District of South Carolina.

Emil Podlesak, Henry J. Podlesak }
and Webster Electric Co., }
Plaintiffs, } Petition.
—vs— }
Sumter Electrical Co., }
Defendant. }

To the Honorable Henry A. M. Smith, Judge of the District Court, for the Eastern District of South Carolina:

Now comes the Sumter Electrical Company, the defendant above named and respectfully shows the Court the following:

First: That on or about the 24th day of August, A. D. 1915, plaintiffs herein filed their Bill of Complaint in this Court, against defendant above named and due service of same was made by the Complainant on the 25 day of August, A. D. 1915.

Second: That the time for answering said Bill of Complaint will expire on the 14th day of September, A. D. 1915.

Third: That since the service of said Bill of Complaint and commencement of this section two of the plaintiffs herein, Emil Podlesak and Henry J. Podlesak, by a certain instrument in writing, by them duly executed and delivered, have assigned to the Splitdorf Electrical Company, of Newark, N. J., and Sumter Electrical Company of Sumter, S. C., defendants herein, the entire right, title and interest of said plaintiffs in and to certain United States letters patent, applications and inventions covered thereby, including re-
76 issued letters patent #13878, granted to said plaintiff on the 9th day of February, A. D. 1915, infringement of which is alleged in the Bill of Complaint, as the grounds of this action, a copy of which said instrument is hereto attached and marked "Exhibit A", and made a part hereof.

Third: That the purchase and acquisition by defendant, Sumter Electrical Company, of said plaintiff's rights have been consummated within the last few days, the papers in the said transaction having been duly executed in Washington, D. C., in Sumter, S. C., and Newark, N. J., so that the entire assignment by the plaintiffs aforesaid has only just now been received.

Fourth: That by reason of the foregoing because of this transaction above set forth and the shortness of the time within which answer would have to be made it would be impossible for your petitioner to properly prepare an Answer to the said Bill of Complaint. That the Webster Electric Company owns no interest in the patent, infringement of which is the basis of this action, but are mere licensees, and this action cannot be maintained by them without joining as parties the owners of the patent; that your petitioner, together with the Splitdorf Electric Company, a New Jersey corporation, are, as assignees, co-owners and successors to all the rights of the said plaintiffs in the said patent and are necessary parties to this action; and upon information and belief the Splitdorf Electrical Company is now preparing to intervene, setting up the facts above stated.

Fifth: That application has been made to plaintiffs above named for an extension of the time to answer, but said request has been refused. That this motion is not intended for delay.

77 Wherefore, your petitioner prays that an Order do issue out of this Honorable Court extending the time to an-

swer the Bill of Complaint for ten (10) days from the date of such order.

And your petitioner will ever pray, etc.

(Signed) THE SUMTER ELECTRICAL COMPANY
by HARMON D. MOISE,
Solicitor.

UNITED STATES DISTRICT COURT

Eastern District of South Carolina

Personally appeared before me HARMON D. MOISE, who being duly sworn says that, in the above stated case, for the Defendant, that he has read the foregoing Petition, and that the facts stated therein are true of his own knowledge, except insofar as they are stated upon information and belief, and as such facts so stated, he believes them to be true; that he makes this verification as Attorney for the defendant herein, in which capacity the foregoing facts have come within his knowledge and belief.

Sworn to and subscribed before me this 13 day of Sept., 1915

HARMON D. MOISE.

(Signed) W. TURNER LOGAN,
Notary Public.

S. C. (Seal)

78 File 2425

Memorandum of agreement made and entered into this 4th day of September, A. D. 1915, by and between Emil Podlesak of Racine Wisconsin, and Henry Joseph Podlesak of Chicago, Illinois, parties of the first part, and the Splitdorf Electric Company, a corporation organized and existing under the laws of the State of New Jersey, having its principal office and place of business located in the City of Newark, County of Essex, in said State, and the Sumter Electrical Company, a corporation organized and existing under the laws of the State of South Carolina, having its principal office and place of business in the City of Sumter, County of Sumter, in said State, said corporations jointly parties of the second part;

Whereas the parties of the first part are the present joint owners of certain inventions relating to inductor electric generators for internal combustion motor ignition, and of certain letters patent granted therefor as follows: No. 947,647,

issued January 25, 1910; No. 948,483, issued February 8, 1910; and 1,003,649, issued September 19, 1911, all for Inductor Generators for Ignition purposes; and of certain other inventions relating to ignition devices for gas engines, for which applications have been filed and letters patent have been granted as follows: No. 1,022,642, issued April 9, 1912, Low Tension Sparking Mechanism; No. 1,055,076, issued March 4, 1913, reissued February 9, 1915, as No. 13,878, for Current Generators and Igniters; No. 1,056,630, issued March 18, 1913, for Inductor Generators for Ignition Purposes; applications serial No. 734,143, filed November 29, 1912, for Igniter Devices for Explosive Engines, patented June 30, 1914, as No. 1,101,956; application serial No. 639,738, filed July 21, 1911, Magneto Machine, patented May 26, 1914, as No. 1,098,052; application serial No. 668,153, filed December 27, 1911, as a division of original application No. 639,738, patented June 2, 1914, as No. 1,098,754; and application serial No. 668,153, filed December 27, 1911, Magneto Machines, patented as No. 1,098,754; and

Whereas said parties of the first part have heretofore granted licenses under said patents to the Webster Electric Company of Racine, Wisconsin, as evidenced by three certain written instruments dated respectively the 5th day of February, 1914, the 5th day of February, 1914, and the 20th day of January, 1915, of which true copies are hereto annexed and marked respectively Exhibits A, B, and C; and

Whereas the parties of the second part having been nominated by F. C. Manning under his option dated August 20, 1915, and being his assignees thereof, are desirous of acquiring the entire interest in the aforesaid inventions, letters patent and applications, together with all rights to manufacture, use and sell said inventions subject only to the said licenses heretofore granted to the Webster Electric Company, also the entire interest of the parties of the first part in the aforesaid agreements with the said Webster Electric Company and in the business of manufacturing and selling magneto ignition apparatus for internal combustion engines, together with the good will appertaining to the said business of the parties of the first part, in part represented by the association of their names or either of them with said business or with apparatus manufactured or to be manufactured and sold under the aforesaid letters patent and applications on said agreements; also all reissues granted or to be granted

or said letters patent and patents granted on said applications, as well as any improvements on said inventions, the applications and patents therefor.

80 File No. 2425

Now therefore be it known that for and in consideration of the sum of Twenty-five Thousand Dollars (\$25,000.00) to them in hand paid, the receipt of which is hereby acknowledged, and for the further considerations hereinafter set forth the parties of the first part have sold, assigned, transferred set over and conveyed, and by these presents do hereby sell, assign, transfer, set over and convey unto the parties of th second part jointly, the entire right, title and interest in, to and under each and every the hereinbefore mentioned inventions and improvements, letters patent, and applications thereof, including the right to sue and recover to their own use for infringement of the same, whether committed before or after the date hereof, this assignment being subject only to the licenses heretofore granted to the Webster Electric Company; also the entire right, title and interest in, to and under or arising out of the aforesaid license agreements with the Webster Electric Company, and the royalties and other profits flowing therefrom after the date hereof, as well as the entire interest and goodwill of the parties of the first part in the business of manufacturing and selling magneto ignition apparatus for internal combustion engines and any other apparatus described or claimed in said letters patent and applications and included in said license agreements; the same to be held and enjoyed by the said parties of the second part, or the survivor of them, their or its successors or assigns, as fully, freely and entirely as they might have been held and enjoyed by the parties of the first part had not this assignment and sale thereof been made.

81 File 2425.

It is understood and agreed that the preparation and the prosecution of all applications for patents on inventions hereby conveyed or agreed to be conveyed, including both pending and new applications, original, divisional, reissue, and extension, shall be the attorney or attorneys for the parties of the second part, on their designation, and the parties of the first part hereby appoint said attorneys as their attorneys for such purpose, and agree that they will at all times keep the parties of the second part or their said attorneys fully informed as to inventions they may make

which might fall within the terms of this agreement, and that they will at all times aid and assist in the preparation and prosecution of said applications, and in any proceedings ancillary thereto all, however, without expense to themselves for costs or attorneys' fees, said expense to be borne entirely by the parties of the second part. The parties of the first part also agree that upon demand of the parties of the second part or said designated attorneys, they will execute assignments satisfactory to said attorneys of all said inventions and improvements not herein specifically designated but included within the scope hereof.

In further consideration of the said transfer and the faithful performance by the parties of the second part of the covenants herein contained, the parties of the second part for themselves, their survivor, successors or assigns, agree to pay an additional sum of Forty Thousand Dollars (\$40,000.00) in four equal installments of Ten Thousand Dollars (\$10,000.00) each, payable one installment on the first day of October of each of the years 1916, 1917, 1918 and 1919.

82 File No. 2425.

In further consideration of the payment to them made which includes a special sum of Five Thousand Dollars (\$5,000.00) for this purpose, which said sum is deemed by the parties hereto to be adequate in the premises, and as ancillary to the foregoing assignment and sale, and in order to protect the parties of the second part, their survivor, successors and assigns in the full and complete realization and enjoyment of the rights, title and interest thus conveyed, the parties of the first part do hereby jointly and severally covenant and agree that they and each of them shall not engage in the manufacture or sale of magneto ignition apparatus for internal combustion engines for and during the period of five years from and after the date of these presents, throughout the territory covered and included within the monopoly granted by the aforesaid letters patent, it being the intention of the parties hereto that the field of business of the parties of the second part includes the whole of and is coextensive with said territory.

It is understood and agreed that no thing in this covenant shall operate to prevent the parties of the first part from engaging in business involving either the use of a magneto generator for other purposes than internal combustion engine ignition, or involving the accomplishment of internal combustion engine ignition by other means than magneto gener-

ator or dynamo; provided said business does not involve any infringement upon any claims of the patents hereby assigned or agreed to be assigned to the parties of the second part, the validity of which is expressly admitted and warranted by the parties of the first part. It is further understood and agreed that in the event of any breach of this covenant not to complete by the parties of the first part or either of them, they shall thereupon become jointly and severally liable to

83 File No. 2425.

the parties of the second part in the sum of Five Thousand Dollars (\$5,000.00) as liquidated damages, and in addition thereto for all actual damages in excess thereto, sustained by the said parties of the second part, their survivor, successors or assignes, by reason of said breach, such damage to be assessed and determined by a court of proper jurisdiction and pending such determination all sums remaining in the hands of the parties of the second part and which would otherwise be due and payable under this agreement to the parties of the second part as security for the payment of the aforesaid damages

The parties of the first part hereby warrant that they have the right to manufacture, use and sell the inventions described and claimed in letters patent No. 1,022,642, April 9, 1912; No. 1,055,076, March 4, 1913, reissued February 9, 1915, as No. 13,878, and 1,056,360, March 18, 1913, also applications serial No. 734,143, filed November 29, 1912, serial No. 668,153, filed December 27, 1911, and serial No. 639,738, filed July 21, 1911; that they are the owners of the said letters patent, and also of all the other letters patent and inventions mentioned in the aforesaid agreements with the Webster Electric Company, Exhibits A, B, and C; that they have the right to make this assignment, including all of said patents and agreements; that they have not previously made any assignment or granted any license, shop right or other rights of any kind or character, of, to, in or under the aforesaid patents, saving and excepting only the rights granted under agreements Exhibits A and B to the Webster Electric Company, and that when they made and entered into said agreements with the said Webster Electric Company, it was understood and agreed on the part of the Webster Electric

84 Company that the parties of the first part hereto reserved and retained to and in themselves all the rights, title and interest herein and hereby warranted and that

the same were assignable by the parties of the first part at their own will and pleasure.

It is understood and agreed that this contract is made under and to be construed according to the laws of the State of New Jersey, and is fully executed and delivered in the City of Newark, in said State.

In Witness Whereof, the parties of the first part have hereunto severally subscribed their names and affixed their seals in triplicate this 4th day of September, A. D. 1915; and the parties of the second part have severally caused their names to be signed and their corporate seals to be affixed hereto at the times and places indicated below, by their respective officers to that end duly empowered.

85

UNITED STATES DISTRICT COURT

For the Eastern District of South Carolina.

| | |
|---|----------------------|
| Emil Podlesak, Henry J. Podlesak and Webster Electric Company, | } <i>Plaintiffs,</i> |
| <i>vs.</i> | |
| Sumter Electrical Company, | |
| | } <i>Defendant.</i> |

ORDER OF DISCONTINUANCE.

On motion of Messrs. Smythe & Visanska and Williams & Bradbury, counsel for plaintiffs herein, and with the consent of Messrs. H. D. Moise and J. I. Cosgrove, of counsel for defendant:

It Is Ordered that this case be and the same is hereby discontinued, without prejudice to the rights of any of the parties hereto, upon payment by complainant of all costs.

(Signed) HENRY A. M. SMITH

U. S. Dist. Judge

23d Sept., 1915

We consent:

(Signed) H. D. MOISE,

Solr. for Sumter Electrical Company

JOHN I. COSGROVE,

Atty. for Splitdorf Electrical Company.

SMYTHE & VISANSKA,

Of Counsel for Webster Electric Company.

EDWARD C. CLEMENT,

Counsel for Defdts.

86 IN THE DISTRICT COURT OF THE UNITED STATES.

For the Eastern District of South Carolina.

In Equity.

I, Richard W. Hutson, Clerk of the District Court of the United States for the Eastern District of South Carolina, do hereby certify, that the foregoing transcript is a true and correct copy of the original record in the case of Emil Podlesak, et al., Complainants against Sumter Electrical Company, Defendant, the original of which is now on file and of record in my office.

Given under my hand and seal of said Court, at Charleston, S. C., this 7th day of December, 1918.

RICHARD W. HUTSON,
C. D. C. U. S. E. D. S. C.

(Seal)

87 (Endorsed) E. Docket No. 157 United States of America Eastern District of South Carolina In the District Court Emil Podlesak, et al. Complainants. against Sumter Electrical Co. Defendants. Certified Copy of Record.

Case No. 46a Oscillogram of Current Curve Plaintiff's Device

← 1 inch = .0274 Sec.

↑ 1 inch = .0385 Amps.
 1831 Amps.

72.0



-3

P 1 C

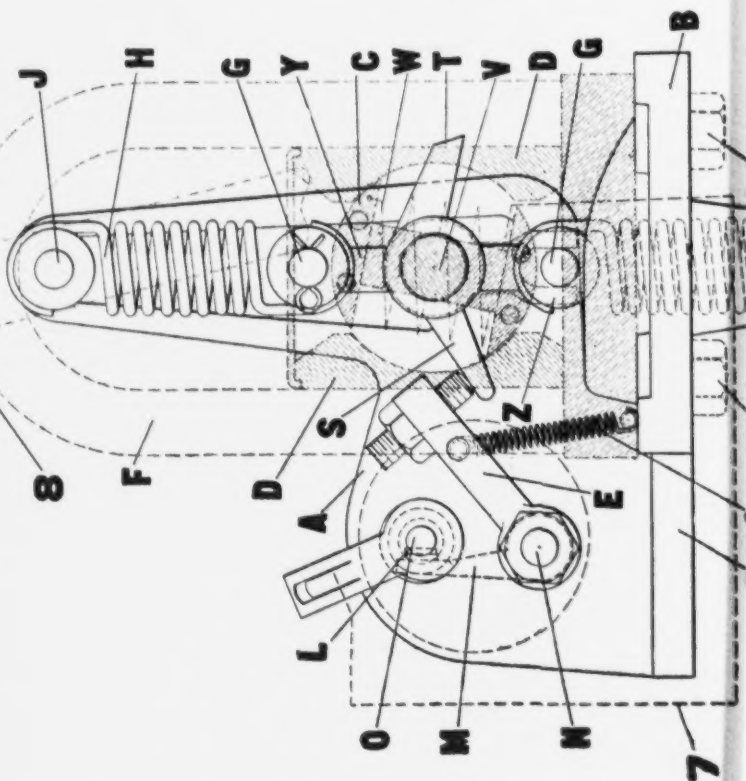
WESTER ELECTRIC CO.
 CHICAGO, ILL.
 DATE: 8/1/18
 J. H. H.

.0025 Sec.



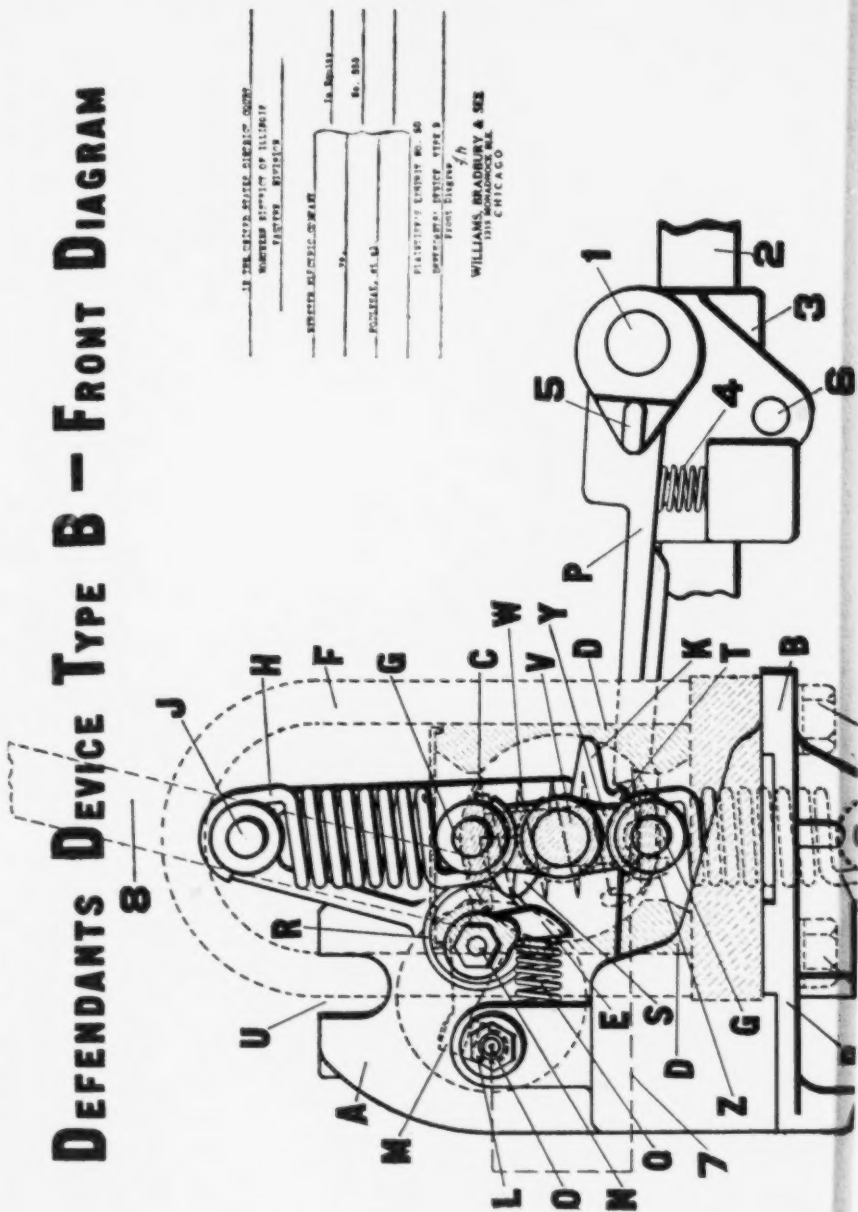
DEFENDANTS DEVICE

WILLIAMS, BRADLEY & SIZ
1216 MONROVIE BLDG.
CHICAGO





DEFENDANTS DEVICE TYPE B - FRONT DIAGRAM

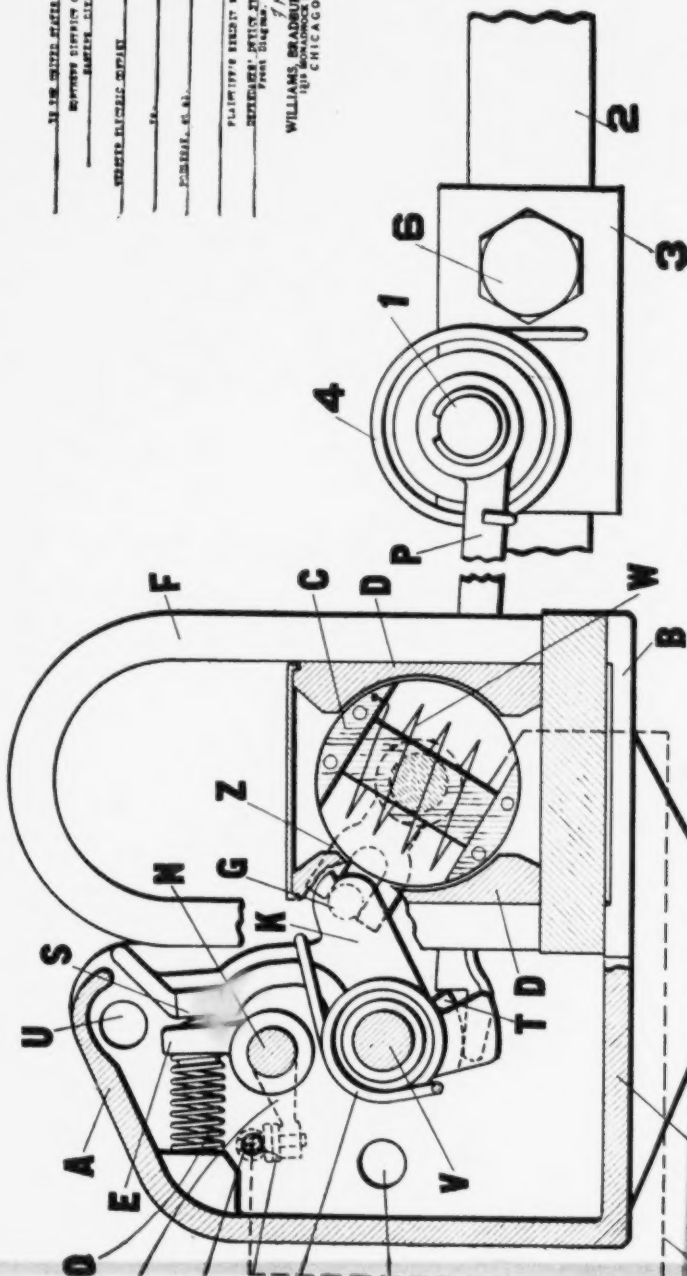




DEFENDANTS DEVICE TYPE C-FRONT DIAGRAM

Plaintiff's Exhibit 51.

55



IN THE UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF ILLINOIS
BARRETT, PLAINTIFF
VERSUS
DEFENDANT'S DEVICE TYPE C

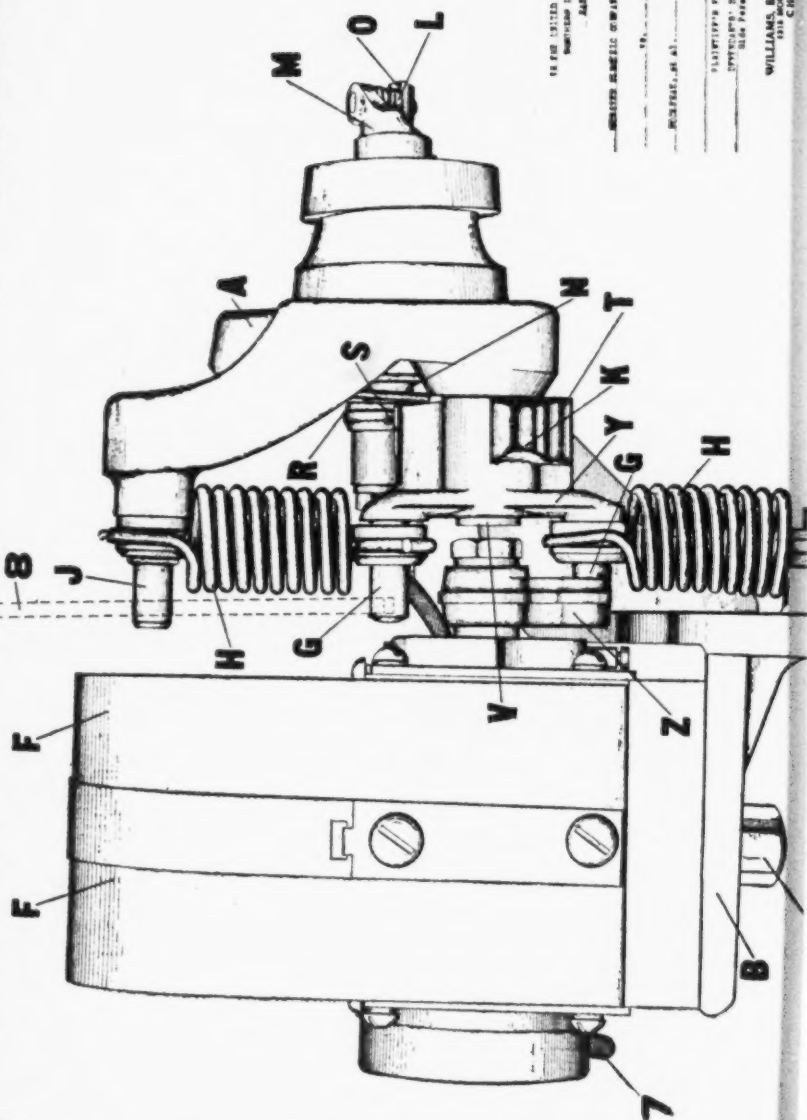
PLAINTIFF'S EXHIBIT NO. 51
DEFENDANT'S DEVICE TYPE C
FROM DIAGRAM
WILLIAMS, BRADSHAW & SEE
1211 MONROE AVE.
CHICAGO



DEFENDANTS DEVICE TYPE B—SIDE PERSPECTIVE

Plaintiff's Exhibit 52.

57



IN FOR UNITED STATES MARSHAL SERVICE
NORTHERN DISTRICT OF ILLINOIS
JANUARY DIVISION

RECEIVED JUNE 10, 1914

RECEIVED JUNE 10, 1914

RECEIVED JUNE 10, 1914

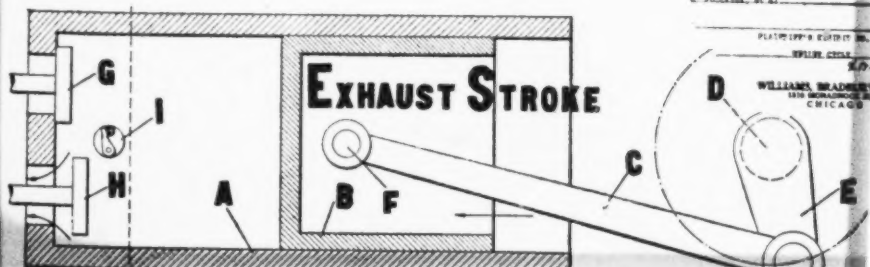
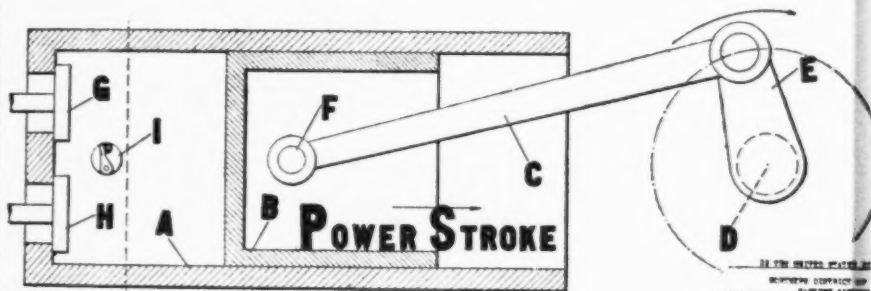
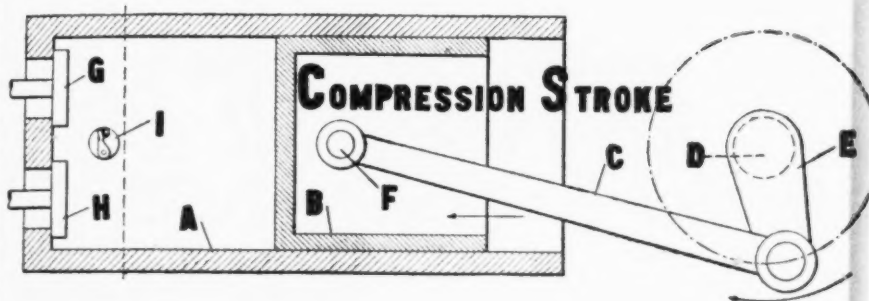
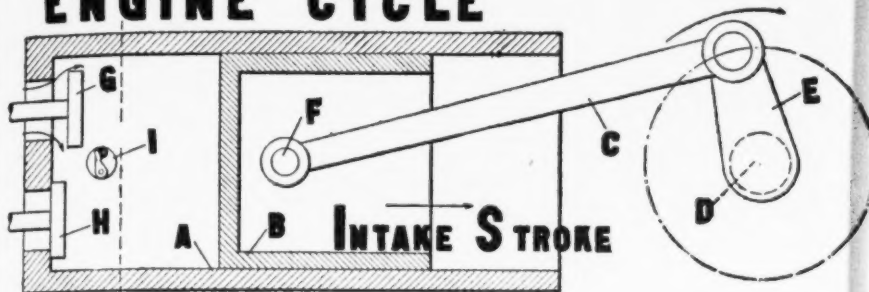
RECEIVED JUNE 10, 1914

PLAINTIFFS EXHIBIT NO. 52
DEFENDANTS DEVICE TYPE B
SIDE PERSPECTIVE

WILLIAMS, BRADSHAW & SONS
111 N. LAKE STREET
CHICAGO



ENGINE CYCLE



BE THE UNITED STATES OF AMERICA
DEPARTMENT OF JUSTICE
DIVISION OF INVESTIGATION

UNITED STATES DEPARTMENT OF JUSTICE

CHICAGO, ILL.

PLAINTIFF'S EXHIBIT NO.

EXHIBIT NO.

WILLIAMS, BRADSHAW & CO.

CHICAGO, ILL.



*Defendant's Device
Typed: Right Side*

Ex. 56

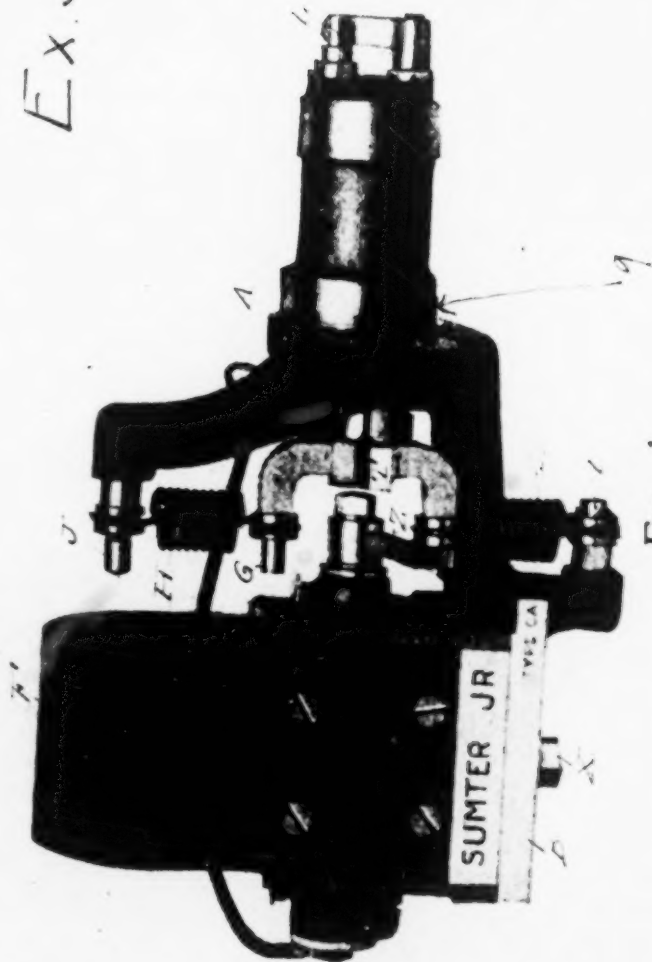


FIG. 1

94

PLAINTIFF'S EXHIBIT 59.

UNITED STATES DISTRICT COURT

Eastern District of Michigan

Southern Division.

| | | |
|--------------------------|--------------|---------------------|
| Emil Podlesak, | } Plaintiff, | Equity No. 112. |
| <i>vs.</i> | | Letters Patent |
| Alamo Manufacturing Co., | | Reissue No. 13,878. |
| | Defendant. | |

THE ANSWERS OF EMIL PODLESAK, PLAINTIFF,
TO CERTAIN OF THE DEFENDANT'S INTERROGA-
TORIES, DATED APRIL 21, 1915.

County of Racine }
State of Wisconsin. } ss:

EMIL PODLESAK, the plaintiff in the above entitled cause, being first duly sworn, on oath deposes and says in answer to certain of the defendant's Interrogatories, dated April 21, 1915, as follows:—

Interrogatory No. 1. What particular claims of Reissue Patent No. 13,878 are alleged by plaintiff to have been infringed by defendant?

Answer: As at present advised, Claims 19 and 21.

Interrogatory No. 2. Is the alleged infringement by reason of manufacture, or by reason of sale, or by reason of use?

Answer: As at present advised, by reason of sale.

Interrogatory No. 13. When did plaintiff first learn of the structure complained of in the Bill of Complaint,

Answer: In January, 1915.

Interrogatory No. 14. When, subsequent to March 4, 1913, did plaintiff first read the claims of Letters Patent No. 1,055,076 which is the original patent upon which Reissue No. 13,878 is based?

Answer: I do not remember exactly but I began the consideration of the necessity for the reissue of Letters Patent No. 1,055,076 sometime between August 15 and September 15, 1914, and I believe that I first read the claims of original Let-

ters Patent No. 1,055,076 between the 15th of August and the 15th of September 1914, I am certain that I had not read them except in a cursory way prior to that period.

Interrogatory No. 16. Is the Webster Electric Company, of Racine, Wisconsin, an exclusive, or any licensee, under Reissue Patent No. 13,878? If not, exactly what interest in or under said Letters Patent does the said Webster Electric Company possess?

Answer: Yes.

EMIL PODLESAK.

Plaintiff.

Subscribed and sworn to before me this 11th day of June A. D. 1915.

FRED H. SCHULTZ,
Notary Public
Racine Co. Wis.

Seal.

My Commission expires Aug. 8th, 1915.

Filed June 14, 1915.

ELMER W. VOORHEIS,
Clerk.

96 United States of America, }
Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of The Answers of Emil Podlesak, Plaintiff, to certain of the Defendant's Interrogatories, Dated April 21, 1915, in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this tenth day of December, in the year of our Lord one thousand nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,
Clerk.

(Seal)

(Endorsed) No. 112. The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Plaintiff's answer to certain of Def's interrogatories. Filed June 14, 1915. Elmer W. Voorheis, Clerk.

97

UNITED STATES DISTRICT COURT.

Eastern District of Michigan

Southern Division.

| | |
|---|---|
| Emil Podlesak, Henry J. Podlesak and Webster Electric Company, <i>Plaintiffs,</i> | } In Equity No. Letters Patent Reissue No. 13878. |
| <i>vs.</i> | |
| Alamo Manufacturing Company, <i>Defendant.</i> | |

AMENDED BILL OF COMPLAINT.

To the Honorable Judges of the District Court of the United States, in and for the Eastern District of Michigan, Southern Division:

EMIL PODLESACK, a citizen of the United States, and a resident of Racine, Racine County, Wisconsin, Henry J. Podlesak, a citizen of the United States and a resident of Chicago, Cook County, Illinois, and the Webster Electric Company, a corporation organized and existing under and by virtue of the laws of the State of West Virginia, having its principal place of business at Racine, in the County of Racine and State of Wisconsin, bring this their Bill of Complaint against the Alamo Manufacturing Co., a corporation organized and existing under and by virtue of the laws of the State of Michigan and having its principal place of business at Hillsdale, in the County of Hillsdale and State of Michigan, within the Southern Division of the Eastern District of Michigan, and thereupon your orators complain and say:—

I.

That heretofore and before the 15th day of April, A. D. 1912, your orator, Emil Podlesak, then a resident of Tiffin, in the County of Seneca, and State of Ohio, was the original, first and sole inventor of a certain new and useful improvement in Current Generator and Igniter for Internal
98 Combustion Engines, fully described in the specifications of the hereinafter mentioned Letters Patent, which invention was not known or used by others in this country or

patented or described in any printed publications in this or any foreign country prior to his invention thereof or more than two years prior to his application for said Letters Patent, had not been in public use or on sale in this country for more than two years prior to said application, had not been abandoned to the public and had not been patented or caused to be patented by him or his legal representatives or assigns in any foreign country upon an application filed more than twelve (12) months prior to the filing of his application for Letters Patent of the United States; that your orator, Emil Podlesak, made due application to the Commissioner of Patents of the United States in accordance with the then existing Acts of Congress, for Letters Patent of the United States for said invention and improvement.

Your orator, Emil Podlesak, having in all respects complied with the conditions and requirements of the said Acts of Congress, on the 14th day of March, A. D. 1913, Letters Patent of the United States No. 1,055,076, signed, sealed and executed in due form of law for the said invention and improvement, were issued and delivered unto your orator, Emil Podlesak, whereby there was granted unto him, the said Emil Podlesak, his heirs and assigns, the sole and exclusive right to make, use and vend the invention set forth, described and claimed therein, for the term of seventeen (17) years from the 4th day of March, A. D. 1913, throughout the United States, and the territories thereof. A printed copy of said patent No. 1,055,076 is hereunto annexed and made a part of this Bill of Complaint.

II.

That the aforesaid Letters Patent No. 1,055,076 were inoperative by reason of a defective and insufficient specification, to fully secure to your orator, Emil Podlesak, the aforesaid invention and improvement which was described in
99 said Letters Patent and intended to be secured thereby and that the error in said Letters Patent rendering the same inoperative, as aforesaid, arose by inadvertence accident and mistake, and without any fraudulent or deceptive intention on the part of your orator, Emil Podlesak, and that on account of the defects and insufficiencies of said Letters Patent, your orator, Emil Podlesak, made application to the Commissioner of Patents, in accordance with the then existing Acts of Congress, for leave to surrender the said

Letters Patent and for the grant to him of new Letters Patent for the same invention in accordance with the amended specifications presented with said application, and for the unexpired part of the term of said original Letters Patent, and that thereupon having fully complied with all the conditions and requirements of said Acts of Congress and having paid the fee required by law, leave to surrender said original Letters Patent was duly granted by the Commissioner of Patents, and on the 9th day of February, A. D. 1915, new and reissued Letters Patent for the same invention and improvement bearing No. 13,878, signed, sealed and executed in due form of law were issued and delivered unto your orator, Emil Podlesak, for the unexpired term of said original Letters Patent, whereby there was secured unto your orator, his heirs and assigns, for said unexpired term of said original Letters Patent, to-wit: until the expiration of the term of seventeen (17) years from the 4th day of March, A. D. 1913, the sale and exclusive right to make, use and vend throughout the United States and territories thereof, the aforesaid invention and improvement. A printed copy of said reissue Patent No. 13,878 is hereunto annexed and made a part of this Bill of Complaint.

III.

That heretofore, by instruments in writing duly signed and delivered, the said Emil Podlesak, one of your orators, sold, assigned and transferred unto Henry J. Podlesak, another of your orators, an undivided interest in the invention disclosed in said reissued Letters Patent No. 13,878, and 100 thereafter said Emil Podlesak and Henry J. Podlesak, by instruments in writing duly executed and delivered, granted unto the said Webster Electric Company a shop right license to make, use and sell the invention described in said reissued Letters Patent No. 13,878, and that your orators are now the sole and exclusive owners of said Letters Patent and are entitled to all of the rights and privileges granted and secured or intended to be granted and secured thereby, and are entitled to all the benefits, damages and moneys that may be recovered for the infringement or violation of said reissued Letters Patent. Proffer is made of said instruments in writing, to be produced in court when necessary.

IV.

Your orators further say unto your Honors that the Alamo Manufacturing Co., well knowing the premises and the rights of your orators, with the intent of injuring your orators and to deprive them of the privileges and advantages which might and otherwise would accrue unto them from their rights in and to said reissued Letters Patent No. 13,878, has within six (6) years prior to the filing of this Bill, since February 9th, 1915, and before the commencement of this suit, unlawfully and without license or allowance by, and against the will of your orators and in infringement of their rights as set forth by said reissued Letters Patent No. 13,878, made, used and sold in the Southern Division of the Eastern District of Michigan and elsewhere in the United States a Current Generator and Igniter for Internal Combustion Engines constructed in accordance with the disclosures of said reissued Letters Patent No. 13,878, and embodying the invention and improvements set forth, described and claimed therein, and that the said Alamo Manufacturing Co., is now continuing so to do and is preparing and threatening so to do in the future and is preparing, aiding and encouraging others so to do within the Southern Division of the Eastern District of Michigan and elsewhere in the United States and

though requested and warned of your orators' rights in 101 the premises and requested to abstain from and cease its infringing acts and operations, said defendant has disregarded such notices and warnings and has refused to cease its infringing and unauthorized acts, all of which is contrary to equity and good conscience and in violation of your orators' rights, as stated, and, further, that but for said defendant's unlawful and unauthorized acts, your orators would still be in the undisturbed possession, use and enjoyment of the exclusive privileges secured to them as owners of said reissued Letters Patent No. 13,878, and in receipt of the profits accruing therefrom, all of which works great and irreparable injury to your orators and to their rights in the premises.

V.

To the end, therefore, that said the Alamo Manufacturing Co., may, if it can, show reason why your orators should not have relief, may it please your Honors to bring said defendant, the Alamo Manufacturing Co., before this court by proc-

ess of subpoena, there to make full, true, direct and perfect answer to the certain matters and things herein set forth and charged (though not under oath, same being hereby expressly waived), and that it be decreed to account for and pay over to your orators the income and profits thus unlawfully derived and which might and would otherwise have been accrued by your orators but for the unlawful and unauthorized acts of said the Alamo Manufacturing Co., and that said the Alamo Manufacturing Co. be required to produce its full records and accounts of all kinds touching upon and concerning its unlawful and unauthorized acts for the guidance of the Court in determining the amount justly due to your orators in consequence thereof; and further, that said the Alamo Manufacturing Co. may be restrained from any further violation of your orators' rights in the premises, may it please your Honors to grant a writ of injunction issuing from and under the seal of this Honorable Court perpetually enjoining and restraining said the Alamo Manufacturing Co.,

its officers, employees, attorneys, agents and representatives of every kind and grade from further manufacture, use or sale in any manner or attempts thereat, or offers, negotiations or encouragement theretowards in violation of your orators' rights as aforesaid; and for the further protection of their rights, your orators pray that a provisional or temporary injunction be issued, restraining said the Alamo Manufacturing Co., its officers, employees, attorneys, agents or representatives of every kind and grade, from any further infringement of said reissued Letters Patent No. 13,878, pending this cause, and your orators further pray for such other relief as the equities of the case may require and to your Honors may seem meet.

And your orators will ever pray etc.,

EMIL PODLESAK

HENRY J. PODLESAK

WEBSTER ELECTRIC COMPANY,

By T. K. WEBSTER,

President.

LYNN A. WILLIAMS

Solicitor for Plaintiffs.

103 United States of America }
State of Wisconsin, } ss.
County of Racine.

EMIL PODLESACK, being first duly sworn, on oath deposes and says:—

That he is one of the plaintiffs named in the foregoing Bill of Complaint; that he has read the foregoing Bill of Complaint; subscribed by him, and knows the contents thereof; that the same is true of his own knowledge, except as to the matters therein stated to be on information and belief, and as to those he believes it to be true; and that he verily believes that he was the true, original, first and sole inventor of the invention described in the patent referred to in the said Bill.

EMIL PODLESACK.

Subscribed to and sworn to before me this 11th day of June, A. D. 1915.

FRED. H. SCHULTZ,

Seal Notary Public Racine Co. Wis.

My Commission expires August 8th, 1915.

Filed June 14, 1915. Elmer W. Voorheis, Clerk.

104 United States of America, }
Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Amended Bill of Complaint in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this tenth day of December, in the year of our Lord one thousand nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,

(Seal)

Clerk.

(Endorsed) The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesack vs. Alamo Mfg. Co. Certified Copy of Amended Bill of Complaint. Filed June 14, 15. Elmer W. Voorheis, Clerk.

105 IN THE DISTRICT COURT OF THE UNITED STATES

For the Eastern District of Michigan,

Southern Division.

| | |
|--|---|
| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, <i>Plaintiffs,</i> | } In Equity No. 112, On Re-issue Letters Patent No. 13,878. |
| <i>vs.</i> Alamo Manufacturing Company, <i>Defendant.</i> | |

MOTION TO DISMISS.

Comes now the above-named Alamo Manufacturing Company, Defendant, and shows this Honorable Court:

1. That the amended bill and amended answer have been filed; that certain interrogatories have been propounded to the defendant by the plaintiffs, and have been duly answered; that certain interrogatories have been propounded to the plaintiffs severally by the defendant; that the interrogatories propounded to the plaintiff Emil Podlesak and to the plaintiff Webster Electric Company have been answered; that it was stipulated by and between counsel for the plaintiffs and defendant that the interrogatories propounded to the plaintiff Henry J. Podlesak should be answered by August 23, 1915; that the plaintiff Henry J. Podlesak has not even to this date answered such interrogatories; that the bill shows on its face that at the time of the filing of the bill said plaintiff Henry J. Podlesak was alleged to be the owner of an undivided interest in the re-issue Letters Patent No. 13,878, involved in this cause, and the plaintiff Webster Electric Company was alleged to be a mere licensee, operating under a license from its co-plaintiffs Emil Podlesak and Henry J. Podlesak.

2. That on the fourth day of September, 1915, the plaintiffs Emil Podlesak and Henry J. Podlesak, by an instrument in writing for a good and valuable consideration, did sell, assign, transfer, set over, and convey unto the Splitdorf Electric Company a corporation organized and existing under the laws of the State of New Jersey, having its principle office and place of business located in the city of Newark, County of Essex, in said state of New Jersey, and the Sum-

ter Electrical Company, a corporation organized and existing under the laws of the state of South Carolina, having its principal office and place of business in the City of Sumter County of Sumter, in said state of South Carolina, the entire right, title and interest in, to, and under the re-issue Letters Patent No. 13,878, alleged by the bill herein to be infringed by the defendant herein, together with the right to use and recover for their own use for infringement of the same, whether committed before or after the date of such assignment, a certified copy of which assignment is ready here in Court to be produced; by which assignment the said Emil Podlesak and Henry J. Podlesak became divested of all right in and to said re-issue Letters Patent No. 13,878, and of all right to prosecute this cause, and the said Splitdorf Electric Company and the said Sumter Electrical Company became necessary parties plaintiff to his cause; and that the said Splitdorf Electric Company and the said Sumter Electrical Company have not been joined as parties plaintiff to this cause.

Wherefore the defendant humbly prays, that the plaintiffs' bill in this cause may stand dismissed out of this Court, with costs to be taxed against the plaintiffs by the Clerk of this Court.

ALAMO MANUFACTURING COMPANY,

By G. B. SCHLEY,

Of Counsel for Defendant.

Indianapolis, Ind.,

November 22, 1915.

Filed November 29, 1915. Elmer W. Voorheis, Clerk. By Carrie Davison Dep Clk.

107 United States of America, }
Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Motion to Dismiss. in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this tenth day of December, in the year of our Lord one thousand

nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,

(Seal)

Clerk.

(Endorsed) No. 112 The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Motion to Dismiss. Filed Nov. 29, 1915. Elmer W. Voorheis, Clerk.

108 IN THE DISTRICT COURT OF THE UNITED STATES

For the Eastern District of Michigan

Southern Division.

Emil Podlesak, Henry J. Podlesak,
and Webster Electric Company,
Plaintiffs,

vs.

Alamo Manufacturing Company,
Defendant.

In Equity No. 112,
On Re-issue Let-
ters Patent
No. 13,878.

MOTION TO AMEND THE ANSWER.

Now comes the defendant, Alamo Manufacturing Company, herein and moves this Honorable Court for leave to amend its amended answer by re-numbering paragraph 14 thereof as 15, and by inserting the following as paragraph 14:

14. Defendant, further answering, alleges on information and belief that on the fourth day of September, 1915, the plaintiffs Emil Podlesak and Henry J. Podlesak, by an instrument in writing for a good and valuable consideration, did sell assign, transfer, set over, and convey unto the Splitdorf Electric Company, a corporation organized and existing under the laws of the State of New Jersey, having its principal office and place of business located in the City of Newark, County of Essex, in said state of New Jersey, and the Sumter Electrical Company, a corporation organized and existing under the laws of the state of South Carolina, having its principal office and place of business in the city of Sumter, County of Sumter, in said state of South Carolina, the entire right, title, and interest in, to and under the re-issue Letters

Patent No. 13,878, alleged by the bill herein to be infringed by the defendant herein, together with the right to use and recover for their own use for infringement of the same, whether committed before or after the date of such assignment, a certified copy of which assignment is ready here in court to be produced, by which assignment the plaintiffs Emil and Henry J. Podlesak became divested of all right to prosecute this suit and the said Splittorf Electric Company and the Sumter Electric Company became necessary parties plaintiff.

ALAMO MANUFACTURING COMPANY
By G. B. SCHLEY,
Of Counsel for Defendant.

Indianapolis, Ind., Nov. 22, 1915

GBS/LB

Filed November 29, 1915. Elmer W. Voorheis, Clerk. By Carrie Davison Dep Clk.

110 United States of America, }
Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Motion to amend the answer in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this tenth day of December, in the year of our Lord one thousand nine hundred and eighteen and of the independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,
Clerk.

(Seal)

(Endorsed) No. 112 The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Notice to Amend the Answer. Filed Nov. 29, 1915. Elmer D. Voorheis, Clk.

112 At a Session of the District Court of the United States for the Eastern District of Michigan, continued and held pursuant to adjournment at the District Court Room in the City of Detroit, in said District, on Monday the Twenty-ninth day of November, in the year of our Lord one thousand nine hundred and fifteen.

Present:—The Honorable Arthur J. Tuttle, United States District Judge.

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|--|---|
| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, <i>Plaintiffs,</i> | } In Equity. No. 112, On Re-issue Let- ters Patent No. 13,878. |
| <i>vs.</i> Alamo Manufacturing Company, <i>Defendant.</i> | |

This cause coming on to be heard this 29th day of November, 1915, upon defendant's Motion for Leave to Amend its Answer, and upon defendant's Motion to Dismiss the Bill, and the Court having heard the arguments of counsel for the respective parties upon the aforesaid matters and having been fully advised in the premises it is Ordered

1. That defendant have leave to amend its answer as set forth in its motion to amend such answer.

2. That the plaintiffs have until December 13, 1915, to answer the motion to dismiss filed by the defendant.

3. That the plaintiff, Henry J. Podlesak, answer on or before December 13, 1915, the interrogatories propounded to him by the defendant.

4. That either party may upon notice set for trial on any Monday after December 13, 1915, the questions raised by the aforesaid motion to dismiss.

ARTHUR J. TUTTLE
United States District Judge.

Approved as to form
LYNN A. WILLIAMS,
For Plaintiffs.
G. B. SCHLEY,
For Defendant.

Filed Nov. 29, 1915, Elmer W. Voorheis, Clerk.

112 United States of America, }
 Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Order Granting Defendant's Motion for Leave to Amend Answer in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this tenth day of December, in the year of our Lord one thousand nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,

(Seal)

Clerk.

(Endorsed) No. 112 The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Order Granting Defendant's Motion for Leave to Amend Answer. Filed Nov. 29, 1915. Elmer W. Voorheis, Clerk.

113 IN THE DISTRICT COURT OF THE UNITED STATES

For the Eastern District of Michigan

Southern Division

| | |
|--|--|
| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, | } In Equity No. 112, On Re-issue Let- ters Patent No. 13,878. |
| <i>Plaintiffs,</i> | |
| <i>vs.</i> | |
| Alamo Manufacturing Company, | } Defendant. |
| <i>Defendant.</i> | |

MOTION.

Now comes the plaintiffs herein by their solicitor and counselor and move this honorable court for an order granting the plaintiffs one weeks time within which to take the deposition of Henry J. Podlesak upon the questions propounded by the

defendant in its interrogatories addressed to the said Henry J. Podlesak, plaintiff, and heretofore filed herein.

This Motion is based upon the record and upon the affidavit of Lynn A. Williams.

LYNN A. WILLIAMS,
Solicitor and Counselor for Plaintiffs.

Filed Dec. 13, 1915. Elmer W. Voorheis, Clerk.

114 IN THE DISTRICT COURT OF THE UNITED STATES

For the Eastern District of Michigan,

Southern Division

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|--|--|
| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, <i>Plaintiffs,</i> | } In Equity No. 112, On Re-issue Let- ters Patent No. 13,878. |
| <i>vs.</i> Alamo Manufacturing Company, <i>Defendant.</i> | |

AFFIDAVIT OF LYNN A. WILLIAMS.

County of Cook, }
State of Illinois. } ss.

LYNN A. WILLIAMS, being first duly sworn on oath deposes and says that I am the attorney for Webster Electric Company or Solicitor and Counselor for the Plaintiffs in the above entitled suit.

Promptly after the Defendants' interrogatories addressed to Henry J. Podlesak, were filed herein, I requested the said Henry J. Podlesak to prepare sworn answers to the said interrogatories. After making the same request several times orally, I wrote to Henry J. Podlesak demanding that he answer the said interrogatories, and for this purpose I prepared and furnished him with a set of answers to the said interrogatories, the said answers being prepared in accordance with the best of my information as to the matters covered by the interrogatories, I requested, demanding of the said Henry J. Podlesak on behalf of the Webster Electric Company that he execute the answers to the interrogatories thus prepared by me, or that he correct the answers to cover

with the facts as he knew them, provided the answers prepared by me were not correct in any particular.

115 The said Henry J. Podlesak has thus far neglected and failed to prepare or execute answers to the said interrogatories.

I make this affidavit in support of the Plaintiff's motion for leave and time to take the deposition of the said Henry J. Podlesak on the matters inquired of in the interrogatories in question.

LYNN A. WILLIAMS.

Subscribed and sworn to before me this 10th day of December, 1915.

MARY A. COOK,
Notary Public.

Notary Seal

Filed December 13, 1915. Elmer W. Voorheis, Clerk.

116 United States of America, {
Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Motion to Take Depositions and Affidavits of Lynn A. Williams in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this tenth day of December, in the year of our Lord one thousand nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,

(Seal)

Clerk.

(Endorsed) No. 112 The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Motion to Take Depositions and Affidavit of Lynn A. Williams. Filed Dec. 13, 1915. Elmer W. Voorheis, Clerk.

117 At A Session of the District Court of the United States for the Eastern District of Michigan, continued and held pursuant to adjournment at the District Court Room in the City of Detroit, in said District, on Monday the Thirteenth day of December, in the year of our Lord one thousand nine hundred and fifteen.

Present:—The Honorable Arthur J. Tuttle, United States District Judge.

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| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, <i>Plaintiffs,</i> | } In Equity No. 112. On Re-issue Let- ters Patent No. 13,878. |
| <i>vs.</i> Alamo Manufacturing Company, <i>Defendant.</i> | |

This cause coming on to be heard upon the plaintiff's motion for one week's time within which to take the deposition of Henry J. Podlesak upon the questions propounded by the Defendant in its interrogatories addressed to the said Henry J. Podlesak heretofore filed herein, and the Court having heard the arguments of counsel for both parties and being advised in the premises,

It Is Ordered: That the plaintiffs are granted leave within one week from this date to take the deposition of Henry J. Podlesak before any duly commissioned Notary Public as special examiner upon the questions propounded by the defendant in its interrogatories addressed to Henry J. Podlesak and heretofore filed herein.

ARTHUR J. TUTTLE
United States District Judge.

Approved as to form,
LYNN A. WILLIAMS
For Plfs.

G. B. SCHLEY
For Def't.

Filed Dec. 13, 1915, Elmer W. Voorheis, Clerk.

118 United States of America, }
 Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Order Granting Motion to Take a Deposition in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this tenth day of December, in the year of our Lord one thousand nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,

(Seal)

Clerk.

(Endorsed) No. 112 The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Order Granting Motion to Take a Deposition. Filed Dec. 13, 1915. Elmer W. Voorheis, Clk.

119 UNITED STATES DISTRICT COURT
 Eastern District of Michigan
 Southern Division.

| | |
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| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, | } Equity No. 112, Re-issue Letters Patent No. 13,- 878. |
| <i>Plaintiffs.</i> | |
| <i>vs.</i> | |
| Alamo Manufacturing Company, | } Defendant. |
| <i>Defendant.</i> | |

DEPOSITION OF HENRY J. PODLESAK.

Taken at 720 Monadnock Block, Chicago, Ill., on Friday, December 17, 1915, pursuant to an order of Court entered on the 13th day of December, 1915, in the above entitled cause, before Mary A. Cook, a Notary Public in and for the County of Cook and State of Illinois, acting by appointment of the Court as Special Examiner.

Present:—Lynn A. Williams, Esq., for Plaintiffs.

HENRY J. PODLESAK, having been duly sworn, testified as follows in answer to questions propounded by counsel:

Direct Examination by Mr. Williams.

Q. 1. Will you please state your name, age and residence?

A. Henry J. Podlesak; age, 47. I reside at 1636 Millard Ave., Chicago, Illinois.

Q. 2. Are you the Henry J. Podlesak who is one of the parties to the suit of Emil Podlesak, Henry J. Podlesak and Webster Electric Company, Plaintiffs, vs. Alamo Manufacturing Company, Equity No. 112, based on re-issue Letters Patent No. 13,878, in the United States District Court for the Eastern District of Michigan, Southern Division.

A. I am.

Q. 3. Certain interrogatories were addressed to you by the defendant in the above-entitled suit and on December 13th, 1915, the Court entered an order directing that your 120 testimony be taken upon the subject matter of these interrogatories which I shall propound to you in the language in which they were filed by the defendant.

What particular claims of re-issue patent No. 13,878 are alleged by this plaintiff (Henry J. Podlesak) to have been infringed by defendant (Alamo Manufacturing Company)?

A. As advised, it is claims 19 and 21 of this reissue patent.

Q. 4. Is such alleged infringement by reason of manufacture or by reason of sale or by reason of use?

A. As at present advised, by reason of sale.

Q. 5. What is the structure manufactured or sold or used by defendant and alleged by this plaintiff (Henry J. Podlesak) to be an infringement?

A. It is an ignition outfit comprising a current generator and igniter sold by the defendant in connection with the gas engine of their make, the particular ignition outfit is, the plaintiff is advised furnished the defendant by the Hercules Electric Company of Indianapolis, Ind., and is known to the trade as the "Wizard" magneto.

Q. 6. What are the precise terms of the alleged assignment set up in paragraph 3 of the Amended Bill of Complaint as having transferred from Emil Podlesak, plaintiff, to Henry J. Podlesak, plaintiff, an undivided interest in the invention disclosed in re-issue patent No. 13,878? In answer to this interrogatory a copy of such alleged assignment may be furnished.

A. The assignment referred to is in the following terms: except that I omit a list of several patents not involved in this case:

"This Agreement, made and entered into on the 17th day of August, 1912, by and between Henry J. Podlesak, of Chicago, Illinois, hereinafter called the party of the first part, and Emil Podlesak, of Tiffin, Ohio, hereinafter called the party of the second part, Witnesseth:

"That, in consideration of One Dollar (\$1.00) by the party of the second part to the party of the first part into hand paid, the party of the first part does hereby sell and give 121 to, and agrees to execute formal assignment papers when called upon to do so by, the party of the second part Forty-nine One-Hundredths ($\frac{49}{100}$) of his entire interest in the below identified U. S. Letters-Patents and any such other patents as may be granted and issued upon the below identified, pending, applications for U. S. Letters-Patent, to-wit:

"2. And further, that in consideration of One Dollar (\$1.00) by the party of the first part to the party of the second part into hand paid, the party of the second part does hereby sell and give to and agrees to execute formal assignment papers when called upon to do so by, the party of the first part Fifty-one One-hundredths ($\frac{51}{100}$) of his entire interest, rights, in the below identified U. S. Letters-Patents and any such other patents as may be granted and issued upon the below identified applications, pending, for U. S. Letters-Patents, to wit:

No. 1,055,076, Mar. 4, 1913—Current Gen. & Ignitor, etc.,—Podlesak E.

and the party of the second part agrees that he has good right and lawful authority to sell and give his entire right or any portion thereof in the above identified patents and applications for patents.

"3. It is further agreed that the formal assignment papers may, if necessary or advisable, be made and executed in respect to any one or more of the herein identified patents or patents that may issue on any of the herein identified applications for patents, this prior to such time when all of said pending applications have matured into patents or have been abandoned.

"4. It is further agreed that the party of the first part and the party of the second part shall each receive Fifty-Hundredths (50/100) of all moneys and such other valuable considerations that may be obtained and received as net proceeds from the sale of any or all, of the above identified patents and application for patents.

122 "5. It is further agreed that the expenses of any suit or litigation that may be brought because of infringement of any of the above identified patents, and any patent that may be granted and issued on any of the above identified applications, shall be equally borne by each of the parties hereto; provided, that both parties hereto agree to join together as party complainants before any such suit is commenced.

"6. It is further agreed that the expenses of prosecuting the above identified pending applications for Letters-Patents shall be borne equally by each of the parties hereto.

"7. It is lastly agreed that the covenants herein shall be binding upon the heirs, assigns, and legal representatives of the parties hereto, and that all prior agreements by and between the parties hereto in respect to any of the above identified patents or applications relating thereto are hereby terminated and cancelled.

(Sgd.) HENRY J. PODLESAK
Party of the first part.
(Sgd.) EMIL PODLESAK,
Party of the second part''

Q. 7. When did this plaintiff (Henry J. Podlesak) first learn of the structure complained of in the Bill of Complaint and alleged to be an infringement?

A. This was about a year ago—in January or February 1915.

Q. 8. When subsequent to March 4th, 1913, did this plaintiff (Henry J. Podlesak) first read the claims of Letters Patent No. 1,055,076, which is the original patent upon which re-issue patent No. 13,878 is based?

A. I do not now remember exactly, but I began the consideration of the necessity for a re-issue of Letters Patent No. 1,055,076 sometime in August or September, 1914, and I believe I first read the claims of the original Letters Patent about the same time, namely, in August or September, 1914. Before this time I had not read these claims except in a cursory way and not carefully.

123 Q. 9. When, subsequent to March 4th, 1913, did this plaintiff (Henry J. Podlesak) first discover the alleged inoperativeness of said original Letters Patent No. 1,055,076 and the supposed need for the re-issue of such patent?

A. As I now remember, it was in the latter part of September or fore part of October, 1914.

HENRY J. PODLESAK.

Deposition Closed.

124

UNITED STATES DISTRICT COURT.

Eastern District of Michigan

Southern Division.

| | |
|--|---|
| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, <i>Plaintiffs,</i> | } Equity No. 112, Re-issue Letters Patent No. 13,878. |
| <i>vs.</i> Alamo Manufacturing Company, <i>Defendant.</i> | |

State of Illinois, }
County of Cook. } ss;

I hereby certify that on the 17th day of December, 1915, before me, Mary A. Cook, a Notary Public in and for the County of Cook and State of Illinois, acting by consent of the Court as Special Examiner, personally appeared, pursuant to the Court's order and the subpoena hereto annexed at ten o'clock A. M., Henry J. Podlesak, the witness named in said notice, and Lynn A. Williams, Esq., appearing for the plaintiff, and the said Henry J. Podlesak being by me first duly cautioned and sworn to testify the whole truth, and being carefully examined, deposed and said as in the foregoing annexed deposition set out.

I further certify that said deposition was begun on the 17th day of December and completed on the same day.

I further certify that the said deposition was then and there reduced to typewriting by me and was, after it had been reduced to typewriting, subscribed by a witness, and the same has been retained by me for the purpose of sealing up and directing the same to the clerk of the court as required by law.

I further certify that the reason why the said deposition

was taken was that the said witness resides at Chicago, 125 Illinois, more than one hundred miles from Detroit, Michigan, the place where this cause is to be tried.

I further certify that I am not of counsel or attorney to either of the parties, nor am I interested in the event of the cause.

Witness my hand and official seal at Chicago, this 17th day of December, A. D. 1915.

Notarial Seal.

MARY A. COOK,
Notary Public.

126 DISTRICT COURT OF THE UNITED STATES OF AMERICA

Northern District of Illinois

Eastern Division.

The United States of America To the Marshal of the Northern District of Illinois, Greeting:

We Command You to Summon Henry J. Podlesak, if found in your District, to be and appear before Mary A. Cook acting as Special Examiner at Room 720 Monadnock Block, Chicago, Illinois on the 17th day of December A. D. 1915 at 10 o'clock A. M. to testify in behalf of the Webster Electric Company in the cause pending in the United States District Court for the Eastern District of Michigan, wherein Podlesak et al are the plaintiffs and Alamo Mfg. Company is defendant.

And this you will in no wise omit under the penalty of the law in that case made and provided. And have you then and there this writ.

Witness the Hon. George A. Carpenter, Judge of the said Court at Chicago, in said District, this 13th day of December in the year of our Lord one thousand nine hundred and fifteen and of the independence of the United States of America the 139th year.

(Sgd) T. C. MacMILLAN,
Clerk.

Seal.

Filed Dec. 18th, 1915. Elmer W. Voorheis, Clerk.

127 United States of America, }
 Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Deposition of Henry J. Podlesak in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this tenth day of December, in the year of our Lord one thousand nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,

(Seal)

Clerk.

(Endorsed) No. 112 The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Depositions of Henry J. Podlesak. Filed Dec. 18, 15 Elmer W. Voorheis, Clk.

128 IN THE UNITED STATES DISTRICT COURT
 Eastern District of Michigan
 Southern Division.

| | |
|--|----------------------|
| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, | } In Equity No. 112. |
| <i>Plaintiffs</i> | |
| <i>vs</i> | |
| Alamo Manufacturing Company, | } In Equity No. 112. |
| <i>Defendant.</i> | |

MOTION.

Plaintiffs by their counsel move that an order be entered dropping the above case from the trial calendar and in support of this motion present the affidavit of Robert M. See.

LYNN A. WILLIAMS,

WILLIAMS, BRADBURY & SEE,

Counsel for Plaintiffs.

Filed January 9th, 1917. Elmer W. Voorheis, Clerk.

129

IN THE UNITED STATES DISTRICT COURT

Eastern District of Michigan.

Southern Division.

| | |
|---|----------------------|
| Emil Podlesak, Henry J. Podlesak and Webster Electric Company, <i>Plaintiffs,</i> | } In Equity No. 112. |
| <i>vs</i> | |
| Alamo Manufacturing Company, <i>Defendant.</i> | |

AFFIDAVIT OF ROBERT M. SEE.

State of Illinois }
County of Cook } ss:

ROBERT M. SEE, being duly sworn, says:

I am a member of the firm of Williams, Bradbury and See, of Chicago, Illinois, who are counsel for plaintiffs in the above entitled cause which has been set for final hearing on January 9, 1917, at nine-thirty o'clock A. M., Central Time.

The Bill of Complaint in the above suit charges infringement of reissue patent No. 13,878, issued to plaintiff Emil Podlesak who assigned an undivided part interest therein to plaintiff Henry J. Podlesak, and said Emil Podlesak and Henry J. Podlesak subsequently granted to plaintiff Webster Electric Company a certain license under said patent, all of which appears by the pleadings and answers to interrogatories heretofore filed.

On or about September 4, 1915, plaintiffs Emil Podlesak and Henry J. Podlesak entered into a certain agreement with the Splitdorf Electrical Company and Sumter Electrical Company by which said Podlesaks purported to convey to said companies all of their rights in said patent and in their license agreement with the Webster Electric Company thereunder.

130 There is pending in the United States District Court for the Northern District of Illinois a suit in Equity brought by this plaintiff Webster Electric Company against Splitdorf Electrical Company, Sumter Electrical Company, and the plaintiffs herein Emil Podlesak and Henry J. Podlesak for their joint infringement of said patent 13,878 and

other patents. There is pending in the United States Patent Office an interference between said patent 13,878 and an application for patent filed by Edmond J. Kane, which application is owned and controlled by plaintiff Webster Electric Company, this interference involving all of the claims of said patent 13,878 in issue in the Chicago suit and in this suit. In said interference it duly appears that the Kane invention was made and completed prior to the Podlesak invention and it was therefore decided by the competent Patent Office Tribunal that the Kane and Podlesak inventions were the same and that Kane was entitled to make the claims of said patent 13,878 which are in issue here, after which the Examiner of Interferences awarded priority of invention of the subject matter set forth in said claims to Edmund J. Kane. Said interference was then appealed and submitted to the Board of Examiners in Chief before whom it is still pending and undecided.

ROBERT M. SEE.

Subscribed and sworn to before me this 6th day of January A. D. 1917.

MARY A. COOK,
Notary Public

Seal

Filed January 9th, 1917. Elmer W. Voorheis, Clerk. By Carrie Davison Dep Clk.

131 United States of America, }
 Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Motion for an Order Dropping the Case from the Trial Calendar, Together with the Affidavit of Robert M. See in Support Thereof, in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this Tenth day of December, in the year of our Lord one thousand

nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,

(Seal)

Clerk.

(Endorsed) No. 112 The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Motion for an Order Dropping the Case from the Trial Calendar Together with the Affidavit of Rovert M. See in Support Thereof. Filed Jan. 9th, 1917. Elmer W. Voorheis, Clk.

132

PLAINTIFF'S EXHIBIT NO. 59.

IN THE UNITED STATES DISTRICT COURT

Eastern District of Michigan

Southern Division

| | |
|---|------------------------------------|
| Emil Podlesak, Henry J. Podlesak, and Webster Electric Company, <i>Plaintiffs</i> | } In Equity No. 112. In Equity. |
| <i>vs</i> Alamo Manufacturing Company, <i>Defendant.</i> | |

Final Decree.

This cause coming on to be heard, and there being no appearance for plaintiff, it is hereby ordered and adjudged and decreed that the Bill be dismissed, without prejudice, with costs to defendant.

ARTHUR J. TUTTLE
District Judge.

Feb'y 1, 1917.

Approved as to form:

LYNN A. WILLIAMS

Counsel for Plaintiff.

HOOD & SCHLEY,

Counsel for Defendant.

Filed Feb'y 1, 1917. Elmer W. Voorheis, Clerk.

133 United States of America, }
 Eastern District of Michigan. } ss.

I, Elmer W. Voorheis, Clerk of the District Court of the United States for the Eastern District of Michigan, do hereby certify that the above and foregoing is a true copy of Final Decree in the therein entitled cause as the same appears on file and of record in my office; that I have compared the same with the original, and it is a true and correct transcript therefrom and of the whole thereof.

In Testimony Whereof, I have hereunto set my hand and affixed the seal of said Court, at Detroit, in said district, this Tenth day of December, in the year of our Lord one thousand nine hundred and eighteen, and of the Independence of the United States of America the one hundred and forty-third.

ELMER W. VOORHEIS,

(Seal)

Clerk.

(Endorsed) No. 112 The District Court of the United States Eastern District of Michigan—Southern Division Emil Podlesak vs. Alamo Mfg. Co. Certified Copy of Final Decree. Filed Feb'y 1, 17. Elmer W. Voorheis, Clerk.

135

PLAINTIFF'S EXHIBIT NO. 60.

IN THE UNITED STATES DISTRICT COURT

Northern District of Illinois

Eastern Division.

Webster Electric Company,
Plaintiff,

—vs—

Henry Joseph Podlesak, Tesla Emil
Podlesak, Sumter Electrical Com-
pany and Splendor Electrical Com-
pany,

Defendants.

No. 553.

Affidavit of Lynn A. Williams

State of Illinois, }
County of Cook. } ss.

LYNN A. WILLIAMS, being first duly sworn on oath, de-
poses and says:

I am attorney at law and am of counsel for the plaintiff,
Webster Electric Company, in the above entitled cause. On
December 2, 1915, there were delivered to me by the Western
Union Telegraph Company two telegrams, one signed,
"Sumter Electrical Company, By Charles T. Mason, Presi-
dent," and the other "John F. Alvord, President." These
telegrams are attached hereto and marked respectively, "Ex-
hibit A—Williams' Affidavit" and "Exhibit B—Williams'
Affidavit."

A few days after the receipt of the telegrams before men-
tioned I received through the United States mail a letter
signed "Sumter Electrical Company, By C. T. Mason, Presi-
dent", this signature being attested by the Assistant Secre-
tary of the Sumter Electrical Company, and impressed
with the Company's seal. This letter is marked "Exhibit
C—Williams' Affidavit". Attached to the letter from the
Sumter Electrical Company was a copy of the telegram which
I had received on December 2d, this copy being marked "Cer-
tified Copy, E. H. Rhame, Asst. Sec." The Copy of the tele-
gram referred to is marked "Exhibit D—Williams' Affi-

davit." A few days after the receipt of the telegram marked "Exhibit B—Williams' Affidavit" I received through the mails a letter signed "Splitdorf Electrical Company, John F. Alvord, President." This letter is attached hereto and marked "Exhibit E—Williams' Affidavit."

LYNN A. WILLIAMS

Subscribed and sworn to before me this 18th day of December, A. D. 1915.

ALBERT K. McCALEB

(Seal)

Notary Public.

137 EXHIBIT A—WILLIAMS' AFFIDAVIT.

(Western Union Telegram.)

B 61 AN EC 41 Blue 5 EX

Received at Cor. Jackson Boulevard and La Salle Sts., Chicago.

Sumter So Car Dec 2, 1109 AM
1642

Lynn A Williams

719 Monadnock Bldg Chicago Ill

The Sumter Electrical Co hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry J Podlesak to you or any other attorney for Webster Electrical Co et al versus Alamo Mfg Co

SUMTER ELECTRICAL CO,

By CHARLES T MASON,

President

1235P

138 EXHIBIT B—WILLIAMS' AFFIDAVIT.

(Western Union Telegram.)

Received at Jackson Boulevard and La Salle St., Chicago.

1915 Dec 2 PM 8 10

C538NY 37 NL 1EX

NK Newark NJ 2

Lynn A Williams

5371

719 Monadnock Block Chicago Ill

Splitdorf Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry J Podlesak to you or any other as attorney for Webster Electrical Company et al versus Alamo Manufacturing Co

JOHN F. ALVORD

President.

139 EXHIBIT C—WILLIAMS' AFFIDAVIT.

December 2nd, 1915.

Lynn A. Williams, Esq.,
719 Monadnock Block,
Chicago, Ill.

Dear Sir;—

Enclosed herewith you will find copy of telegram which we have just sent you.

We wish to confirm this telegram as follows:

"The Sumter Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry J. Podlesak to you or any other attorney for Webster Electric Company et al versus Alamo Manufacturing Company"

Yours very truly,

SUMTER ELECTRICAL COMPANY,

By C. T. MASON,
President.

(Seal)

Attest:

E. H. RHAME

Asst. Secretary.

HRV/IB.

140 EXHIBIT D—WILLIAMS' AFFIDAVIT.

(Western Union Telegram.)

Lynn A. Williams,
719 Monadnock Block,
Chicago, Ill.

The Sumter Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry J. Podlesak to you or any other attorney for Webster Electric Company et al versus Alamo Manufacturing Company.

SUMTER ELECTRICAL COMPANY

By CHARLES T. MASON,
President.

(Seal)

Certified Copy.

E. H. RHAME,

Asst. Sec.

12-2-15

11:00 AM

HRV (Ch. Co.)

Paid

141 EXHIBIT E—WILLIAMS' AFFIDAVIT.

(Letterhead of Splitdorf Electrical Company.)

Newark, N. J. Dec. 2, 1915.

Mr. Lynn A. Williams,
719 Monadnock Block,
Chicago, Ill.

Dear Sir:—

We have today telegraphed you as follows:

"Splitdorf Electrical Company hereby revoke all agency and power of attorney heretofore executed by Emil Podlesak and Henry J. Podlesak to you or any other as attorney for Webster Electrical Company et al versus Alamo Manufacturing Company."

which we hereby beg to confirm.

Kindly govern yourself accordingly, and oblige,

Yours very truly,

SPLITDORF ELECTRICAL CO.

JOHN F. ALVORD

President.

MWB/LGM.

B.

142 (Endorsed) No. 553 United States District Court
Nor District of Ill. East Div In Equity Webster Elec.
Co. Plaintiff vs. H. J. Podlesak et al Defendant Affidavit
of Lynn A. Williams Filed Dec 20 1915 at o'clock M.
T. C. MacMillan Clerk

144 PLAINTIFF'S EXHIBIT NO. 61.

Hearing May 14, 1917.

(Copy)

"Mr. Wright: I now offer the same in evidence and read the same into the record as follows:

August 10, 1915.

Patent Matters

Dear Van:—

Although I am terribly rushed today trying to get things in shape to leave for Nebraska tonight, H. J. Podlesack dropped in and gave me a chance to find out what he knew about Webster's latest move. H. J. brought in his new oscillator to show me. He had just come in from Champlain, Illinois, where they have been holding a tractor meet, and said

one of the Webster agents had told him he understood there was a deal on between Webster and Sumter and that Webster was going to take over Sumter, or vice versa. Someone had also told him that Williams, Brown, Mr. Webster and a Mr. Becker, the latter a Chicago banker, were all in New York where an important conference is being held, or was held last week with the Sumter interests.

'I asked H. J. what he knew of the patent Webster Company is claiming an anti-dating the Dixie. He says it is the old Varley idea which has been modified to some extent by the original Webster Company's engineer, one Milton, the exploits of whom nearly wrecked the old Webster Mfg. Co. This fellow, Milton, he says is the chap who got him (H. J. and his brother Emil) into the Webster organization because of Milton's infringement of the Podlesak patents, the matter having been finally adjusted by Podlesak giving the Webster people a license, their royalties to be not less than \$5,000 per year. This year it will run to \$12,000 he says.

'It appears that Milton had some agreement with the original company (Webster) whereby if they sold out he was to be paid \$50,000. This was compromised to half the amount and that the present Webster Co. had to pay off this \$25,000.

H. J. claims that the old company's experience with Mil-145 ton's high tension machine cost them many thousand dollars and that if they have any idea of reviving this machine it will soon break the present company.

'He says Lynn Williams evidently thinks some of the claims of this patent may read on the Dixie, but that he does not think Williams has a very broad idea of the previous history of machines of this Varley type. Podlesak is evidently very well informed as to the similarly constructed machines resembling the Dixie, and I believe it may be a good idea for you or Clement to have a talk with him, as he can tell you a great deal of the history of this Milton-Webster patent, his suggestions to Milton, etc. etc. He said he had just scrapped one of these old machines a few days ago.

'It appears that Milton went from the old Webster Co., to the Remy people, where he did more experimenting with machines of the Varley principal. Soon after he married a woman of some means and for the past year or so has been living in Detroit where he has been developing some other devices, and recently has written Emil Podlesak offering him a proposition to come with him and commercialize his new scheme. I neglected to ask Podlesak what the new scheme is.

'I think I have scared H. J. pretty well out of the idea of manufacturing his own new machine, but from what I could get out of him today, it appears he has the right under his agreement with the Webster Co. to manufacture any of the Podlesak magneto outfits himself, or to sell his patent with this right to manufacture and sell without interference from the Webster Electrical Co. Brown would probably dispute this, but he says his contracts with the Webster Co. will make clear his rights as stated in the premises. Now, if 146 Brown (the Webster people) gets too obstreperous, and if the bad feelings between Brown and Podlesak continues to brew as at present, I think H. J. and Emil will be in the frame of mind to consider such negotiations with us as would let us right into the Webster business, and with their line and the plug oscillator, we sure would be in shape to command the field. I don't think Podlesak would expect anything like royalty he is collecting from the Webster Co.; and besides this Brown is getting 5% on the gross sales, besides his salary.

It is pretty tough on me, with these matters coming up and without my knowing anything of what has been going on down in New York, beyond what you wrote me the other day, so I hope you will advise me fully in the premises. I certainly wish you and Mr. Clement would get out here together as I believe we could have a very interesting "round" with the Podlesaks.

'Hope you can get some sense out of the above, all of which I have run off in a hurry and on an empty stomach too, as haven't had time to get out to lunch today.

Hastily,

FCM.WK.#40."

THIS VOUCHER CHECK

1996-1997

RESERVE BANK
OF CHICGO
J. B. CRAMER, Cashier

Vice President

RACINE, WIS., January 13th, 1919.

To Splitdorf Electrical Company

On a/c Royalties, 4th quarter 1918

As per our letter do you Sept 19, 1946 6728 90

19, 1976 6728 90

19, 1976 6728 90

'I think
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PLAINTIFF'S EXHIBIT 64

Escrow Agreement

This agreement, made and entered into this 10th day of April A. D., 1912, between John L. Milton of Louisville, in the County of Jefferson, and State of Kentucky, party of the first part, and Webster Electric Co., a corporation organized and existing under and by virtue of the laws of the state of West Virginia, and having its principal place for doing business in the City of Tiffin, County of Seneca, and State of Ohio, party of the second part.

Witnesseth: That

Whereas, said party of the second part is indebted to the party of the first part in the just and true sum of Fifteen Thousand Dollars (\$15,000.00) as evidenced by Seventy-five (75) promissory notes, for the amount of Two Hundred Dollars (\$200.00) each, and each bearing interest at the rate of five (5%) per cent. per annum from and after the first day of May, A. D., 1913; the said notes being payable at intervals of one month beginning on the first day of May, A. D., 1913, the said notes having been signed by the party of the third part, by its duly authenticated officers and having been made payable to the order of the party of the third part, and having by agreement been turned over to Lynn A. Williams, a resident of the City of Evanston, in the County of Cook and State of Illinois, for the benefit of the party of the first part hereto; and

Whereas, the said party of the second part is desirous of securing to the party of the first part the payment of each and all of said notes at or before its maturity; and

Whereas, in order to furnish security for the payment of the said note to the order of the party of the first part, said parties hereto are desirous of placing or having placed in escrow a certain assignment of certain inventions and letters Patent and applications therefor of said party of the first part, which said assignment is to be held and delivered by the escrow holder, as mutually agreed and subject to certain conditions hereinafter specified;

151 Now, therefore, in consideration of the premises and of One Dollar (\$1.00) by each in hand paid to the other and receipt whereof is hereby acknowledged.

It is agreed as follows:

1. That the original assignment heretofore mentioned, duly executed by the party of the first part and a copy of

which is attached hereto for purposes of reference, and as such made a part hereof, shall be delivered to, held by and remain in escrow with Lynn A. Williams, of the City of Evanston, County of Cook, and State of Illinois, until said party of the second part shall have paid to the order of the party of the first part each and all of the said notes for Two Hundred Dollars (\$200.00) each and each bearing interest at the rate of five (5%) per cent. per annum from and after the first day of May, A. D., 1913, and which said notes mature on the first day of May, A. D., 1913, and successively thereafter on the first day of each of the seventy-four (74) months succeeding, to the total amount of Fifteen Thousand Dollars (\$15,000.00) whereupon said escrow holder shall turn over and deliver to the party of the second part the said assignment duly executed by the party of the first part; provided, however, that in the event that the said party of the second part shall fail to pay any of said notes with interest at maturity, and when presented for payment by the said party of the first part, or his order, then said escrow holder, upon being advised in writing of the said default, shall, upon proof of such default, notify the party of the second part in writing of the said default, and if, within fifteen (15) days thereafter the party of the second part shall not have made payment to the party of the first part of any and all notes theretofore matured and with interest as in the notes provided, then the escrow holder shall, upon ten (10) days' notice in writing to the party of the first part and to the party of the second part, sell and turn over to the highest bidder the said blank assignment of patent applications and patents described therein, and shall apply the proceeds of said sale to the payment of the said notes remaining unpaid by the party of the second part at the time of such sale, and shall turn over to the party of the second part the remainder of the proceeds of such sale, if any.

In Witness Whereof, the parties hereto have hereunto set their hands and seals, the party of the second part by its duly authorized officers, as of the day and year first above written.

JOHN L. MILTON (Seal)

WEBSTER ELECTRIC CO.

By T. K. WEBSTER

President.

Attest:

Secretary.

ACCEPTANCE OF ESCROW.

I hereby accept the original assignment from John L. Milton to Webster Electric Co., referred to in the foregoing original agreement between said parties and consent to act as escrow in the matter in accordance with the terms of said agreement.

Dated at Chicago, Illinois, this 10th day of April, 1912.

LYNN A. WILLIAMS.

153

AGREEMENT

This Agreement, made this 10th day of April 1912, by and between John L. Milton, of Louisville, in the County of Jefferson, and State of Kentucky, party of the first part, The Webster M'f'g. Company, a corporation organized and existing under and by virtue of the laws of the State of Ohio and having its principal office and place of business at Tiffin, in the State of Ohio, party of the second part, Webster Electric Co., a corporation organized and existing under and by virtue of the laws of the State of West Virginia, and having its principal office and place of business at Tiffin, in the State of Ohio, party of the third part, and Towner K. Webster, of Evanston, in the County of Cook and State of Illinois, party of the fourth part;

Witnesseth:

Whereas the party of the first part is the inventor of certain inventions and improvements relating to High Tension Ignition Apparatus and Systems and Low Tension Ignition Apparatus and Systems for which he has filed applications for United States Letters Patent, upon some of which applications patents have been granted, and

Whereas the parties to this agreement have heretofore entered into various agreements, both verbal and in writing, relating to the aforesaid inventions and improvements of said party of the first part, disclosed and embodied in his patents and applications for patents, heretofore referred to and as follows:

| Case | Serial No. | Filed | Allowed | Issued | Improvement |
|------|------------|-----------|----------|------------------------|---|
| 1 | 307,391 | 3/22/06 | 11/ 5/00 | 5/31/10 \$959,954 | Electric Generators. |
| 2 | 357,041 | 2/12/07 | | | Inductor Generators. |
| 3 | 379,485 | 6/17/07 | | | Inductor Generators for Ignition Purposes. |
| 4 | 384,049 | 7/16/07 | | | Inductor Alternator. |
| 5 | 443,608 | 7/15/08 | | | Magneto Ignition Ap- paratus. |
| 6 | 422,584 | 3/23/08 | 6/14/11 | 1/16/12 \$1,015,275 | Electrical Equipment for Automobiles. |
| 7 | 420,118 | 4/25/08 | | | Magneto Ignition Sys- tems and Apparatus. |
| 8 | 475,170 | 1/30/09 | | | Apparatus for the Pro- duction of Alternating Currents. |
| 9 | 475,171 | 1/30/09 | | | Apparatus and Method for Generating Alter- nating Currents. |
| 10 | 589,564 | 10/28/10 | | | Magneto Generators. |
| 11 | None | Not Filed | | | Inductor Alternators. |
| 12 | 591,929 | 11/12/10 | 12/24/10 | | Method of Making Electric Coils. |
| 13 | 591,930 | 11/12/10 | | | Magneto Ignition Sys- tems for Internal Com- bustion Engines. |
| 14 | 621,458 | 4/17/11 | | | Electric Coils and Con- densers. |
| 15 | 615,184 | 3/18/11 | | | Magneto Ignition Sys- tems for Internal Com- bustion Engines. |

and to other transactions, matters and things pertaining to the manufacture, use and sale of said Ignition Apparatus 155 and Systems embodying the said inventions or improvements of said first party, all of which prior agreements the parties hereto are desirous of canceling and having superseded by this agreement, and

Whereas, the parties hereto are desirous of settling and disposing of all differences, controversies, accountings, understandings, agreements, claims and demands, causes of action, actions at law and suits in equity of every kind, nature and description existing between said first party and the other parties hereto, and

Whereas said party of the first part is to acquire by assignment the entire right, title and interest in and to the said inventions and improvements and applications and patents therefor, relating to High Tension Ignition Apparatus and Systems, and said party of the third part is to acquire by assignment the entire right, title and interest in and to the said inventions and improvements relating to Low Tension Ignition Apparatus and Systems, and

Whereas said party of the first part is to receive the sum of Twenty-five Thousand Dollars (\$25,000.00) from said third party as follows: Thirty-five Hundred Dollars (\$35,000.00) in cash at the time of the execution of this agreement and the remainder at intervals as hereinafter stated; and said party of the first part is to be secured in the payment of a part of the consideration, to-wit: Six Thousand, Five Hundred Dollars (\$6,500.00), by the execution by said party of the third part of a chattel mortgage and notes for the benefit of the party of the first part upon certain of the personal property of said party of the third part; and for securance of payment to the said party of the first part of the balance of the 156 consideration, to-wit: Fifteen Thousand Dollars (\$15,000.00), an assignment to the party of the third part of said inventions and improvements in Low Tension Ignition Apparatus and Systems and patents and applications therefor is to be placed in escrow pending the payment to said party of the first part of said sum of Fifteen Thousand Dollars (\$15,000.00), and

Whereas certain pending suits against said parties of the second part and third parts are to be dismissed at the costs of said party of the first part,

Now, therefore, in consideration of the premises and the mutual undertakings of the parties hereto, and of One Dollar (\$1.00) by each in hand paid to each of the others, the receipt whereof is hereby acknowledged, the parties agree and covenant, as follows:

1. The parties of the second, third and fourth parts agree to execute at the time of execution of this agreement an assignment to said party of the first part of their entire right, title and interest in and to each and every of the inventions and improvements of said party of the first part, relating to High and Low Tension Ignition Apparatus and Systems and the applications for patents and patents therefor.

2. The party of the first part agrees to execute at the time of execution of this agreement an assignment in blank of all the right, title and interest in and to the said inventions and improvements relating to Low Tension Ignition Apparatus and Systems and the said applications for patents and patents therefor, and in and to any inventions and improvements relating to Low Tension Ignition Apparatus and Systems 157 which the said party of the first part has made, a copy of which assignment is attached hereto and the provisions

of which are made a part hereof, the said blank assignment to be delivered into the hands of an escrow holder and held by him subject to an escrow agreement of even date herewith and a copy of which is hereto attached and made a part hereof.

3. The party of the third part agrees to pay to and for the benefit of the party of the first part the sum of Twenty-five Thousand Dollars (\$25,000.00) as follows: Thirty-five Hundred Dollars (\$3500.00) to be paid in cash simultaneously with the execution of this agreement, and promissory notes secured by chattel mortgage as hereinafter provided, signed by the party of the third part to be delivered to Lynn A. Williams of the City of Evanston, County of Cook, and State of Illinois, for the benefit of the said John L. Milton as provided in an agreement between said John L. Milton, Webster Electric Co. and said Lynn A. Williams, executed of even date herewith and a copy of which said agreement is attached hereto and made a part hereof, the said promissory notes to bear interest at the rate of six (6%) per cent. per annum, the first note to be for the amount of Fifteen Hundred Dollars (\$1500.00) payable three months after the date of execution of this agreement, the second note to be for the amount of Twenty-five Hundred Dollars (\$2500.00) payable six months after the date of execution of this agreement, and the third note to be for the amount of Twenty-five Hundred Dollars (\$2500.00) payable twelve months after the date of the execution of this agreement; and said party of the third part further agrees to pay to the party of the first part an additional sum of Fifteen Thousand Dollars (\$15,000.00) payable in monthly installments of Two Hundred Dollars (\$200.00) each, with interest at the rate of five (5%) per cent. per annum from and after the first day of May, A. D., 1913, the first said payment of Two Hundred Dollars (\$200.00) to be made on the first day of May, A. D., 1913, and subsequent payments of Two Hundred Dollars (\$200.00) each to be made on the first day of each month thereafter until the whole sum of Fifteen Thousand Dollars (\$15,000.00) has been paid, these payments of Two Hundred Dollars (\$200.00) per month to the total amount of Fifteen Thousand Dollars (\$15,000.00) being secured by promissory notes bearing interest at the rate of five (5%) per cent. per annum from and after the first day of May, A. D., 1913, which said notes payable to the order

of the party of the first part shall be executed by the party of the third part and delivered to the party of the first part simultaneously with the execution of this agreement. It is expressly understood and agreed that the party of the third part shall have the privilege of paying to the party of the first part or his order, the amount of any or all of said notes for Two Hundred Dollars (\$200.00) each, at any date prior to their maturity.

4. Said party of the third part hereby agrees to execute at the time of execution of this agreement a chattel mortgage to said Lynn A. Williams, upon certain of its personal property, the said chattel mortgage to be handled by said Lynn A. Williams for the benefit of said John L. Milton to secure the payment of said three, six and twelve months' notes, as provided in an agreement between said Webster Electric Co., said John L. Milton, and said Lynn A. Williams, executed of even date herewith and a copy of which said agreement is attached hereto and made a part hereof.

5. It is understood and agreed that to secure the payment of the Fifteen Thousand Dollars (\$15,000.00), which is to be paid to said first party at the rate of Two Hundred Dollars (\$200.00) a month, commencing on the first day of May, A. D., 1913, the assignment to the party of the third part referred to in Section 2 hereof shall be placed in and remain in escrow pending the payment of the whole of said sum of Fifteen
159 Thousand Dollars (\$15,000.00) to said party of the first part, all as provided in a certain escrow agreement entered into by and between the parties of the first and third parts hereto and executed of even date herewith, and a copy of which said escrow agreement is attached hereto and made a part hereof.

6. Said party of the first part agrees to cause promptly the dismissal, at his own costs, of suit brought in the Municipal Court of Chicago, Cook County, Illinois, by one Browinski, against said parties of the second and third parts hereto, which suit is known as No. 202,470; and said party of the first part further agrees to cancel the notes heretofore made by said parties of the second and third parts relating to said matter sued upon and cause them to be returned to said parties of the second and third parts.

7. Said party of the first part agrees to cause the dismissal promptly, at his own costs, of the suit brought by said party of the first part against said party of the second part in the

Circuit Court of Cook County, Illinois, which suit is known as No. 310,064.

8. Said party of the first part agrees to and does hereby release all his interest in the shares of stock of said party of the third part, and of any other corporation, which he might have been entitled to under the terms of any and all agreements with the parties of the second, third or fourth parts hereto.

9. Said party of the first part agrees to and does hereby release and forever relinquish all right, title and interest of whatever kind and nature that he may have against said parties of the second, third and fourth parts, except as specifically provided herein as to the payment to or for him of Twenty-five Thousand Dollars (\$25,000.00), and said parties of the second, third and fourth parts, and each of them, are hereby released by said party of the first part of and from all accountings, controversies, understandings, agreements, claims and demands, causes of action, actions at law, suits in equity of every kind, nature or description which said party of the first part now has or ever has had against said parties of the second, third and fourth parts, or any or either of them, except only as herein otherwise provided, and party of the first part hereby specifically releases the parties of the second, third and fourth parts, and each and all of them under any and all claims which he has or had, or which he may or might have asserted for the payment of patent royalties or license fees of any kind whatsoever, and any such claim for the payment of patent royalties or license fees is hereby specifically waived and cancelled.

10. The party of the third part hereby grants unto said John L. Milton, his heirs, assigns and legal representatives a license to make, use and sell throughout the whole of the United States, its territories and possessions, high-tension (jump spark) ignition apparatus and systems embodying the inventions described and claimed in the said patent applications Case 2 and Case 5 and any United States patent or patents that may be granted thereupon, the said license to continue and be in force until the full end of the term for which the said patent or patents may be granted.

11. This Agreement shall extend to and be binding upon the heirs, executors, administrators, successors and assigns of the parties hereto.

In Witness Whereof, the parties hereto have hereunto set

their hands and affixed their seals, the parties of the second and third parts by their duly authorized officers, all as of the day and year first above written, at Chicago, Illinois.

JOHN L. MILTON (Seal)
THE WEBSTER M'FG COMPANY,
By T. K. WEBSTER
President.
THE WEBSTER ELECTRIC CO.
By T. K. WEBSTER
President.
TOWNER K. WEBSTER (Seal)

Attest:

Secretary.

Attest:

161

ASSIGNMENT

For and in Consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable considerations, the receipt of which is hereby acknowledged, I, John L. Milton, of Louisville, in the County of Jefferson, and State of Kentucky, to hereby sell, assign and transfer unto

....., the whole right, title and interest in and to my inventions and improvements disclosed in the following named United States Letters Patent and applications for patent and in and to the following United States Letters Patent and applications for patent:

| Case | Serial No. | Filed | Allowed | Issued | Improvement |
|------|------------|----------|----------|----------------------|---|
| 1 | 307,391 | 3/22/06 | 11/ 5/09 | 5/31/10 \$959,954 | Electric Generators. |
| 2 | 357,041 | 2/12/07 | | | Inductor Generators. |
| 3 | 379,485 | 6/17/07 | | | Inductor Generators for Ignition Purposes. |
| 5 | 443,608 | 7/15/08 | | | Magneto Ignition Ap- paratus. |
| 9 | 475,171 | 1/30/09 | | | Apparatus and Method for Generating Alter- nating Currents. |
| 10 | 589,654 | 10/28/10 | | | Magneto Generators. |

the said right, title and interest to be held and enjoyed by the said _____, for its own use and behoof and for the use and behoof of its successors and assigns to the full end of the term for which said Letters Patent are and may be granted, as fully and entirely as the same would have been held and enjoyed by me had this 162 assignment and sale not been made, and I hereby sell, assign and transfer to _____

all rights and causes of action and suit resulting from infringements of said patents which may have occurred at any time during the life of said patent and prior to the date hereof, and I further hereby sell, assign and transfer unto said _____, the whole right, title and interest in and to any inventions and improvements relating to Low Tension Ignition Apparatus and Systems which I have made, and I agree to execute all papers, including formal assignments, which may be necessary or expedient to enable said _____ to obtain and acquire patents thereon and legal title thereto.

I Authorize and Request the Commissioner of Patents to issue the patents which may be granted on said applications to said assignee for the sole use and behoof of said assignee, its successors and assigns.

In Testimony Whereof, I have signed my name and affixed my seal at Chicago, Illinois, as of the 10th day of April, A. D., 1912.

JOHN L. MILTON (Seal)

State of Illinois }
County of Cook } ss:

Be it remembered that on this 10th day of April, 1912, before me, Leonard W. Novander, a Notary Public, duly commissioned, qualified and acting in and for the County and State aforesaid, came John L. Milton, personally known to me to be the identical person whose name is subscribed to the foregoing instrument of writing and acknowledged that he executed and signed the same as his free act and deed for the purposes and consideration therein expressed.

In Witness Whereof I have hereunto set my hand and affixed my official seal the day and year last above written.

LEONARD W. NOVANDER
Notary Public.

164

PLAINTIFF'S EXHIBIT 65

Agreement.

This Agreement, made this 23rd day of November, 1907, by and between John L. Milton, of Chicago, in the County of Cook, and State of Illinois, party of the first part, and the Webster M'f'g Co., a corporation of the State of Illinois, having its principal office and place of business at Chicago, Illinois, hereinafter called the party of the second part;

Witnesseth:

Whereas, the said John L. Milton has filed in the Patent Office of the United States, at Washington, D. C. applications for letters patent for inventions and improvements in Electric Generators for Ignition Purposes, dated and numbered respectively; March 22nd, 1906, Serial No. 307,391; February 12th, 1907, Serial No. 357,041; June 17th, 1907, Serial No. 379,485; and July 16th, 1907, Serial No. 384,049; and

Whereas, the parties to this agreement have heretofore entered into agreements, both verbal and in writing, relating to the aforesaid inventions and improvements disclosed and embodied in the aforesaid applications for letters patent, and to other matters and things pertaining to the manufacture, use and sale of Electric Generators embodying the said inventions or improvements of said first party, all of which prior agreements both parties now desire to cancel and have superseded by this agreement; and

Whereas, the party of the second part is desirous of
165 acquiring the exclusive right and license to manufacture, use and sell electric generators embodying and containing the inventions and improvements of the first party as disclosed and set forth in the said applications for letters patent of the United States, and of any and all other inventions or improvements which the said first party has made, or may make in the future, or acquire, relating to Electric Generators for Ignition Purposes and to Ignition Apparatus for use in Connection with Internal Combustion Engines or Motors; each and all of which inventions or improvements are hereinafter, for brevity, called "Milton Improvements"; and

Whereas, the said party of the first part agreed to give and grant to the party of the second part the sole and exclusive right and license to manufacture, use and sell throughout the United States and territories thereof Electric Generators for Ignition Purposes, embodying and containing the inven-

tion or inventions of the said first party, as disclosed and set forth in the aforesaid applications for letters patent of the United States, and any improvements on said inventions or improvements in Electrical Generators for Ignition Purposes and Ignition Apparatus for Use in Connection with Internal Combustion Engines or Motors, which the said first party has made or may in the future make, or acquire, or in which he shall in any wise be interested, as a joint inventor, by purchase, or otherwise;

Now, Therefore, the parties hereto covenant and agree as follows:

1. That any and all prior agreements between them relating to the aforesaid inventions or improvements in Electric Generators, and the aforesaid applications for letters patent therefor, are canceled and shall from now henceforth for all time be considered canceled and of no force and effect; and, in consideration of the mutual considerations and covenants hereinafter set forth shall be and are superseded by this agreement which is entered into in the stead of any and all such prior agreements;

2. The Said John L. Milton, party of the first part, hereby gives and grants to the Webster M't'g Co., party of the second part, its successors and assigns, the sole and exclusive right and license to manufacture, use and sell throughout the United States and territories and possessions thereof, Electric Generators for Ignition Purposes and ignition apparatus embodying and containing the said "Milton Improvements," for and during the life of any and all letters patent of the United States which may be granted for any and all such "Milton Improvements";

3. During the life of this agreement, all inventions or improvements made by the said party of the first part relating to Electric Generators for Ignition Purposes and to Ignition Apparatus for use in Connection with Internal Combustion Engines or Motors; all applications for letters patent of the United States made by the said party of the first part relating to Electric Generators for Ignition Purposes and to Ignition Apparatus for use in Connection with Internal Combustion Engines for Motors, and all patents granted to
167 the said party of the first part relating to Electric Generators for Ignition Purposes and to Ignition Apparatus for use in Connection with Internal Combustion Engines or Motors, and all such inventions or improvements and the patents therefor in which he shall have or acquire any inter-

est, shall be regarded as and shall be embraced by and included within, the terms of this contract and agreement;

4. The party of the second part, its successors or assigns, covenants and agrees to account for and pay over to the said party of the first part a royalty or license fee upon all Electric Generators for Ignition Purposes and Ignition Apparatus for use in Connection with Internal Combustion Engines or Motors, made and sold by the said second party, and having and containing said "Milton Improvements," for which letters patent of the United States have been granted to the said first party, and are owned by him, ten per cent (10%) of all monies collected by the said second party on sales of such Electric Generators for Ignition Purposes and Ignition Apparatus for use in Connection with Internal Combustion Engines or Motors, provided, however, that if such patented invention or inventions, or improvement, or improvements, of the said first party are dominated by and subordinated to any patents owned or controlled by said second party; or in case the second party shall be obliged, under existing contracts, to pay royalties under other patents, the said second party shall pay to the said first party a royalty or license fee of five per cent (5%) of all monies collected on sales of Electric Generators for Ignition Purposes and Ignition Apparatus for use in Connection with Internal Combustion Engines or Motors, manufactured and sold by it and embraced by and included within the terms of this contract and agreement; provided, that nothing herein contained shall be construed to require payment of a royalty or license fee upon parts made and applied by the said second party only for the purpose of repair, and provided further that the party of the second part shall not sell the "Milton Improvements" at cost or for less than a fair market price, it being the spirit of this agreement that the party of the first part shall receive as a royalty his percentage of a fair market price;

5. The party of the second part agrees to keep just and true books of account, showing the number of devices or apparatus which it shall make, having and containing the said "Milton Improvements" or any of them; said books to be open at all reasonable times to inspection by the said party of the first part, or his duly authorized agent;

6. The party of the second part further covenants and agrees to render upon the 10th day of the months of January and July in each and every year, during the continuance

of this license and agreement, a strict and true account setting forth the number of devices or apparatus having and containing said inventions or improvements, or any of them, made by it, and with each and every account to make payment of the royalties due and owed by said second party for the period covered by said account.

7. The party of the second part shall plainly and durably mark upon each Electric Generator for Ignition Purposes, and upon Ignition Apparatus made by it and containing said "Milton Improvements" for which letters patent of the United States have been granted, or any of them, the word "Patented", together with the date or dates of the letters patent covering the same:

8. The party of the second part further covenants and agrees that it will exercise due diligence and its best endeavors to introduce said "Milton Improvements" to the public, and to create and supply a demand for said Electric Generators for Ignition Purposes and Ignition Apparatus for use in Connection with Internal Combustion Engines or Motors, and will also make such Electric Generators for Ignition Purposes and Ignition Apparatus for use in Connection with Internal Combustion Engines or Motors in a good and workmanlike manner;

9. The party of the second part shall not at any time, while this exclusive license agreement and contract remains in full force and effect, dispute the validity of any or all letters patent for any or all said "Milton Improvements" which may hereafter be granted and embraced by and included in the terms of this contract and agreement, and which it shall use, nor shall it dispute the title of the party of the first part thereto;

10. The party of the first part covenants and agrees that he has not executed and will not execute any instrument or agreement in conflict therewith;

11. If the party of the second part, during the life of this agreement, shall cease to manufacture said "Milton

Improvements" as shown by Patent Applications, Nos. 307,391 & 357,041, for a continuous period of eighteen (18) months, then, and in such case, the said first party may terminate this exclusive license agreement by a written notice served upon the said party of the second part and the payment to the said second party of five thousand Dollars (\$5000.) If the party of the second part shall for a period of eighteen (18) months cease to manufacture said "Milton

Improvements", known as the "Jump Spark" and "Trifurcated Pole", then the party of the first part may terminate this license as to the patents covering the same, without the payment of any money to the party of the second part.

12. It is further understood and agreed that in the event the second party sells, assigns, or disposes, in any way, of any or all of the rights granted to and secured by it under the terms of this exclusive license agreement, then, and in that event, the said party of the second part shall give the said party of the first part ten percent (10%) of the proceeds received from the said sale by the said second party, whatever be the nature of the said proceeds, it being understood that such sale must be a bona fide one and for the reasonable market value of the right title and interest sold;

Nothing in this clause #12, shall be construed to mean that parties buying rights of party of the second part shall be released from paying royalties to party of first part, as stated in this agreement.

13. If the improvements or inventions set forth and disclosed in any or all of the Letters Patent hereafter granted and by this agreement embraced and included, shall be infringed and the first party, having due and timely notice of such infringement, shall not promptly take, at his own cost, the necessary proceedings to effectually defend the said letters Patent, any, or all of them, then, and in any such case, it shall be lawful for the second party to institute and conduct such suit or proceedings as is necessary to protect its interests, at its own expense.

The party of the first part covenants and agrees, that, in the event that the second party desires to institute and
171 conduct such suit or proceedings in the name of the said first party, or jointly with him, the first party will promptly sign or execute any and all legal papers or instruments necessary for the proper instituting and conducting of such suit and proceedings, except that first party shall not be required to sign any bond or obligation for costs or other expenses of litigation;

14. It is further agreed by and between the parties hereto, that in case any proceeding shall be commenced against the said second party for infringing any patent because of anything done by it under this agreement, and the first party, having due and timely notice of such proceedings, shall not promptly take, at his own cost, the necessary action to defend against said suit, then, and in any such case, it shall be lawful

for the second party to defend and conduct such suit or proceedings, and from the date of the institution or commencement of any such suit, or suits, the party of the second part may charge the cost of such litigation against the net proceeds which shall accrue from the sale of said "Milton Improvements" during the pendency of such proceedings and shall be entitled to deduct from the royalties accruing to the party of the first part, after the beginning of said suit or proceedings, such proportion of the cost of such litigation as the royalties reserved to said first party, under the terms of this agreement, shall bear to the total net profits received by said second party during the same period; e. g. if the net profits received by the party of the second part, after deducting all expenses excepting expenses of litigation and including the

amount charged as royalty, is twelve dollars (\$12.00), 172 and the royalty due thereon is three dollars (\$3.00) then the party of the first part shall be charged with one-fourth ($\frac{1}{4}$) of said expenses and in like proportions whatever the royalty may be.

The second party, in the event that it shall elect to conduct said litigation as stated above shall use all due effort to bring such proceedings to a speedy conclusion; and it is further agreed that the party of the first part shall not be required to contribute any portion of the expenses of defending such suit if the infringement charged relates solely to devices on which he receives only five per cent (5%) of the net selling price as royalty;

15. The party of the first part agrees that he will, during the term of this contract, fully disclose to the party of the second part, promptly when made, every invention or improvement coming within the provisions of this agreement which he may make, invent, or acquire, and that he will, and his legal representatives and assigns shall promptly execute and deliver at any time upon request of the second party, any and all papers that may be necessary or desirable to protect the rights of the second party by this agreement acquired and not in conflict herewith; and any and all applications for letters patent of the United States relating to said "Milton Improvements," which counsel for second party deem should be filed in the United States Patent Office; and any and all papers that may be necessary and desirable to properly prosecute any and all of said applications for letters patent; It is further understood and agreed that 173 the party of the first part shall aid and assist the party of the second part by all proper means to prosecute said

applications, and in any interference that may arise under the same, and in any suit or, proceeding brought under any of the Letters Patent covered by this agreement, and in any suit brought against the party of the second part for infringement by reason of any thing it may make under this license, by giving any information or proper testimony within his power, and without compensation, except his actual expenses while so assisting of testifying.

16. The party of the second part covenants and agrees to pay any and all expenses incident to the preparation, filing, prosecuting and patenting of any and all applications for Letters Patent of the United States relating to said "Milton Improvements" for which patent counsel for second party deem that Letters Patent of the United States should be secured, and any and all expenses incident to the preparation, filing, and prosecuting of any and all applications for the reissue of any letters patent of the United States granted for said "Milton Improvements" which Letters Patent counsel for the second party deem should be reissued;

17. If the royalties herein agreed to be paid to the party of the first part shall not during the year beginning eighteen (18) months after the grant of Letters Patent of the United States on either of said applications, 379,485; 384,049, or not later than eighteen (18) months after July 1st. 1908 amount to at least Eight Hundred Dollars (\$800.00), or, if said royalties shall not amount to at least said sum during any 174 one year after said first year, the party of the first part may terminate this agreement by giving sixty (60) days' notice, in writing, of his election so to do to the party of the second part, provided, however, that the party of the second part may continue this agreement in force by paying the said first party said sum of Eight Hundred Dollars (800.) annually;

18. It is further agreed between the parties hereto that in case any or all of the letters patent hereby embraced and included shall be determined invalid by legal procedure, or in case said second party shall be enjoined from using them, or any of them, the second party shall from such time be released from any and all obligations to pay further royalties under such patent, or patents; as have been invalidated.

Finally: This agreement shall extend to and be binding upon the heirs, executors, administrators and assigns of the party of the first part, and the successors and assigns of the

party of the second part, and shall expire with the expiration of that patent last issue upon said pending applications.

Referring to Par. 11 in this Agreement, the following modification has been agreed to by both parties; If in the development of the manufacture and sale of the magnetos referred to in this agreement, it should be found that the business cannot be successfully carried on, on account of the failure, either mechanically or electrically, of the Milton devices so that the machines are not a practical success and do not give uniform and perfect satisfaction, then and in that event Party of the First Part must pay to Party of the Second Part the Five Thousand dollars (\$5,000.) named in Par. 11, before he can cancel this exclusive license given to party of Second Part, but should the Milton Improvements be found to be perfectly satisfactory, both mechanically and electrically, but if, for commercial reasons, the Party of the Second Part does not continue to manufacture and sell the magnetos manufactured under these Milton Patents, then and in that event, Party of the First Part has the right to cancel this exclusive license, without cost to said Party of the First Part, and Party of the Second Part is to acknowledge cancellation and return to said Party of the First Part the patent applications No. 307,391 and No. 357,041., without clouding the title to said Party of the First Part, in said inventions.

In Witness Whereof the Party of the First Part has hereunto set his hand and seal and the Party of the Second Part has caused its name to be signed hereto by its President and it corporate seal attested by its Secretary to be hereunto affixed at Chicago, Illinois, the day and year first above written.

JNO. L. MILTON,
WEBSTER MFG. Co.

By T. K. WEBSTER,
Its President.

(Seal)

Attest:

JNO. P. LENOX,
Its Secretary.

Signed, Sealed and
Delivered in the Presence of

L. H. WEBSTER,
L. F. KITCHILL.

Chicago, Ill.

May 10, 1896

Dear Mr. Lewis Milton

I have just received your letter containing my name on the equalizing of the 1000 men in Masons

union and I am very glad to hear of it. I am sure it will be a great success. I am sure it will be a great success. I am sure it will be a great success.

will build up the union and make it a great success. I am sure it will be a great success. I am sure it will be a great success.

I am sure it will be a great success. I am sure it will be a great success. I am sure it will be a great success.

I am sure it will be a great success. I am sure it will be a great success. I am sure it will be a great success.

I am sure it will be a great success. I am sure it will be a great success. I am sure it will be a great success.

I am sure it will be a great success. I am sure it will be a great success. I am sure it will be a great success.

Yours very truly,

Chicago, Ill.
May 10, 1896

Old Post
1896



Mr. John Lewis Milton,

3000 W. Grand Boulevard

Detroit

Mich



180

PLAINTIFF'S EXHIBIT 67.

May 9th, 1916.

Mr. Gerald D. Chiville,
3449 Elaine Place,
Chicago, Illinois.

My dear Gerald:—

Your letter of the 5th inst. reached me Saturday afternoon and knowing that Mr. See was to call on me Monday, I delayed answering your letter until this time. The question of advising you in this matter is rather a difficult one as the events referred to transpired quite a long time ago and it is no wonder that our minds are a bit hazy on the subject.

Mr. See had a number of sketches with him. One in particular, that was found in Brown & Williams' old files of my patent application that was never filed. This refreshed my mind very materially. It was for the type of magneto operating mechanism that I made to overcome the trouble encountered with the first I. H. C. type of spring operating magneto. He had with him the sketch which was made by Kane under instructions, for the type of bracket which was finally adopted. He also had a tracing that Kane made and which, I believe, is the one you mention in your letter. It carried the main coil springs attached to the inductor by means of studs extending through the spider and the other end extending to the outside end of the pole pieces. This apparatus was bolted on to the spark plugs and was a two piece affair. We never built it owing to the fact that it was impractical, very complicated and not direct. The feature that Kane is entitled to is the method of operating the roller for holding the pusher rod up, on the idle strokes of the engine and thereby allow the magneto mechanism to remain inactive. This is the point on which he asked for a patent and which apparently has been refused by the patent office.

I filed my application in England in October, 1909. When his attorney found that he could not get the feature he claimed, he layed claim to the features that I developed and have had patents issued in several countries for several years. His claims were made just a few months ago. It does not seem to me that he can explain this dilatory action.

Sometime this year the title of my low tension patents will pass to the Webster Electric Company and, of course, my direct interest is severed. However, I want to see the Webster people hold a valid title to the invention.

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It is really impossible for me to advise you whether to sign the affidavit or not and if I was in your place, I certainly would not do it unless I felt absolutely sure that every statement contained therein is clear in my mind and that I believed it to be absolutely accurate.

I certainly appreciate your kind letter and the interest you have manifested and I want to thank you. My family is quite well and appreciates your message. We are glad to hear that all of you continue to enjoy your usual good health.

With best regards to yourself and family, I am

Yours truly,

JLM:MAC

182

PLAINTIFF'S EXHIBIT 68.

Motor Ignition & Devices Co.
Boydell Building
Detroit, U. S. A.

Oct. 11th, 1915.

Mr. Lynn A. Williams,
c/o Williams & Bradbury,
Monadnock Block,
Chicago, Ill.

Dear Lynn:—

Up to the present writing my blueprints and data have not arrived from Louisville. I had hoped that they would be here prior to my departure for New York tonight so I could study them while away on the trip.

As soon as I return and have a chance to look at the prints, which should be one week from today, I will again write you.

Yours very truly,

JLM:LRJ.

JNO. L. MILTON.

183

Interference No. 39013—Milton vs Kane,
Milton Case 10.

November 5, 1915.

John L. Milton, Esq.,
C/o Motor Ignition & Devices Co.,
Boydell Bldg.,
40 LaFayette Blvd.,
Detroit, Mich.

Dear Sir:—

Enclosed please find the preliminary statement in the interference with Kane, pursuant to our conversation yester-

day. Please find also an envelope bearing the title of the interference, etc. as required by the Patent Office rules.

Will you please sign the preliminary statement before a Notary Public and have his seal attached. The preliminary statement is to be sealed up in the envelope bearing the title of the interference, and this envelope is in turn to be placed in another envelope addressed to the Commissioner of Patents, all as enclosed herewith. I take it you will see that the preliminary statement is thus mailed to the Commissioner of Patents in time to reach Washington on Monday, the 8th inst.

You will note that I have included the statement to the effect that certain papers have already been sent you by your brother-in-law. I have an impression that this is correct, and in accordance with what you have advised me. If, however, I am mistaken in this, you can cross out that part of the preliminary statement, or modify it by interlining to correspond with the facts. I am enclosing a carbon copy of the preliminary statement to be retained by you if you desire.

Yours very truly,

Enclosure.

185

November 19, 1915.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40 E. Lafayette St.,
Detroit, Mich.

Dear Sir:

I sent you the preliminary statement in the Kane-Milton Interference on November 5th, asking you to sign the preliminary statement and forward it directly to the Patent Office, which I have no doubt you did. We did not, however, receive any reply. Will you be kind enough to advise me whether the matter was taken care of in due course?

Yours very truly,

186

Motor Ignition & Devices Co.
40-46 East Lafayette Avenue
Detroit, U. S. A.

Nov. 20th, 1915.

Mr. Lynn A. Williams,
Monadnock Block,
Chicago, Illinois.

Dear Sir:—

The preliminary statement of the Kane-Milton interfer-

ence arrived on Nov. 6th and I forwarded it to Washington by Special Delivery in duly executed form, on the same day.

It is my plan to be in Chicago Monday at which time I will get in communication with you and deliver the Trust agreement.

Yours very truly,

JLM:LJ.

Jno. L. MILTON.

187

December 30, 1915.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40 E. LaFayette Ave.,
Detroit, Mich.

Dear Sir:

The application for your patent No. 1,096,048, which has become involved in interference with E. J. Kane, was filed on October 28, 1910. The Kane application with which your patent is in interference is a division of an application filed on February 2, 1910. Under these circumstances Kane is the senior party to the interference and you are the junior party. It is necessary that the junior party be the first to take testimony in an interference proceeding, the burden of proof being upon him to carry his dates back prior to the filing date of the senior party. You will remember, however, that the disclosure of your patent is substantially identical with the disclosure of your British patent No. 24,838 of 1909, the application for which was filed on October 28, 1909. Inasmuch as the application for your United States patent was filed within one year of the date of filing in Great Britain we are, under the statutes, entitled to take advantage of your date of filing in Great Britain.

It is our intention to obtain from the British Patent Office a certified copy of the application for your British patent 188 as originally filed and file this certified copy in the United States Patent Office, together with a motion that the burden of proof in the Milton-Kane interference be shifted, thus, in effect, making Kane the junior party and making it necessary for him to establish dates prior to October 28, 1909, before it will be necessary for us to introduce proofs in your behalf. The day before yesterday we cabled our London associates, Messrs. Dicker, Pollak & Derriman, requesting them to obtain from the British Patent Office a certified copy of your application. We are just in receipt of a cablegram advising us that our associates will have to have an authorization from you before the necessary certified copy

can be obtained. We have, therefore, prepared a blank form of authorization which if you will kindly sign and send to Messrs. Dicker, Pollak & Derriman in the enclosed envelope will enable us to obtain the necessary copy and certificate. We are not advised as to just what form of authorization will be necessary and, therefore, have merely drawn up a blank form which may be filled out in the proper manner by Messrs. Dicker, Pollak & Derriman. Enclosed herewith you will find a letter of transmittal which you may enclose with the authorization.

Yours very truly,

Enclosures.

189

Motor Ignition & Devices Co.
40-46 East Lafayette Avenue
Detroit, U. S. A.

Jan. 3rd, 1916.

Williams & Bradbury,
Monadnock Block,
Chicago, Ill.

Gentlemen:—

Complying with your request of the 30th ult. I have this day forwarded to Messrs. Dicker, Pollak & Derriman, blank authorization to be used in the interference with E. J. Kane.

Yours very truly,

JLM:LRJ.

190

Jno. L. MILTON.

January 4, 1916.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40-46 East LaFayette Ave.,
Detroit, Mich.

Dear Sir:

We have your favor of January 3d, advising that you have forwarded the blank authorization to Messrs. Dicker, Pollak & Derriman.

Permit us to thank you for your prompt attention to this matter.

We shall advise you of future developments in the Milton-Kane Interference.

Yours very truly,

128

Plaintiff's Exhibit 68.

191

Motor Ignition & Devices Co.
40-46 East Lafayette Avenue
Detroit, U. S. A.

Jan. 6th, 1916.

Williams & Bradbury,
Monadnock Block,
Chicago, Ill.

Gentlemen:—

According to my best memory, there is a certified copy, either in my files or in yours, of my British patent which corresponds to the one U. S. Patent involved in the Milton-Kane interference and if there is any particular rush about getting the certified copy on file here in the United States, I will make a careful search for it.

Please advise.

Yours very truly,

JLM:LJ.

J. L. MILTON.

192

January 11, 1916.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40-46 East LaFayette Ave.,
Detroit, Mich.

Dear Sir:

Your favor of the 6th instant has been received. We do not find that we have any certified copy of your British Patent which corresponds to the United States Patent involved in the Milton-Kane Interference, but we do have in our files the original grant of the British patent. Perhaps this is what you had in mind. However, what we have to obtain and file is not a certified copy of your British Patent as issued, but a certified copy of the original application for the British Patent.

Inasmuch as you signed and forwarded the authorization which we sent you, we believe that we shall be able to secure the certified copy of your original British application in ample time to make our motion to shift the burden of proof as outlined in our former letter.

Thanking you, we are,

Yours very truly,

193

May 3, 1916.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40 LaFayette Blvd.,
Detroit, Mich.

Dear Sir:

We are making a final investigation of the facts in the interference between the Webster Electric Company's patent No. 1,096,048, issued to you, and the application of Kane, and we should like very much to go over this whole matter with you again and get at the real facts as accurately as possible.

Our Mr. See will take care of the matter, and he would like, if possible, to confer with you in Detroit next Monday morning, May 8th, at which time it would be highly satisfactory if you could have with you any drawings or other data bearing on the matter.

It is highly desirable that this matter be closed up as soon as possible, and we will appreciate it very much if you will advise us by return mail if you can confer with Mr. See Monday morning, and if so, where he will find you. If Monday will not suit your convenience for this conference please advise us the earliest day after Monday that will be suitable.

Yours very truly,

194

MOTOR IGNITION & DEVICES CO.
40-46 East Lafayette Avenue
Detroit, U. S. A.

May 5th, 1916.

Williams, Bradbury & See,
1315 Monadnock Block,
Chicago, Illinois.

Gentlemen:—

Replying to your letter of the 3rd desire to advise that it would be satisfactory for Mr. See to come over Monday the 8th. inst. In the meantime, I shall gather up the drawing and data referred to.

I might state that I have been trying for at least a week to get over to Chicago and was not able to accomplish it by reason of stress of more urgent matters here and that it is now my plan to get over there next week at which time I could arrange to give you some of my time. I will leave this entirely to your judgment.

Yours very truly,

JLM:MAC

JNO. L. MILTON.

130

Plaintiff's Exhibit 68.

195

May 6, 1916.

John L. Milton,
c/o Motor Ignition & Devices Co.,
40 East LaFayette Ave.,
Detroit, Michigan.

Mr. See will be in Detroit Monday morning. Please have all data possible.

WILLIAMS, BRADBURY & SEE.

Charge to account of
Lynn A. Williams.

196

May 9, 1916.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40 East LaFayette Blvd.,
Detroit, Mich.

Dear Mr. Milton:

As I promised you, this is to make a record of the fact that I have taken from among your data relating to Milton Case 10 the following items:

1. A photograph of the experimental magneto on the end of a Field Brundage engine.
2. A photograph of the new magneto on an International Harvester engine.
3. Three photographs of the new magneto disassembled and assembled.
4. A leaflet entitled "Milton Magnetos" published by the International Harvester Company.
5. A booklet entitled "Milton Magnetos" published by the Webster Manufacturing Company.
6. A booklet entitled "Webster-Milton Low Tension Magneto" published by the Webster Electric Company.

We appreciate very much indeed the time and help which you have given to this matter and I, personally, wish to thank you for a very pleasant morning.

197 It will be a great help to us if as soon as you get to Louisville next week you will look through your data there and send us anything that you think has a bearing on this matter. Since we must decide what is to be done and act accordingly within the next couple of weeks we hope that you can find time to dig these matters out and send them to us, if there are any, soon after you reach Louisville.

Yours very truly,

198

September 11, 1916.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40-46 Lafayette Ave.,
Detroit, Mich.

Dear Sir:

As opportunity has offered Mr. See has interviewed all of the possible witnesses as to the inventorship of the unitary plug and bracket arrangement which is involved in interference No. 39,013 between your patent and the Kane application, and I have just been reviewing all of the drawings and reports of interviews and the affidavits of the various parties.

There is no question but what there is more definite and explicit corroborative evidence to support Kane's allegations than there are to support your allegations. Under the circumstances I am convinced that we would have a better prospect of sustaining the patent containing these claims if made by Kane than if made by you. Under the circumstances we should like to file a concession of priority in favor of Kane, and have drawn up such a form. Will you be kind enough to execute the original copy of this concession and return
199 it to me at your early convenience? Please be kind enough also to have two parties sign as witnesses to your signature.

For the purpose of your records I am enclosing an extra carbon copy which you may retain.

Yours very truly,

Encl.

200

Motor Ignition & Devices Co.
40-46 East Lafayette Avenue
Detroit, U. S. A.

Williams, Bradbury & See,
1315 Monadnock Block,
Chicago, Ill.

Gentlemen:—

In reply to your letter of the 1st inst. dealing with Interference No. 39,013, would say that I can not concede priority because I personally am positive that Kane is not entitled to it and second, I am by no means convinced but that sufficient Court Proofs may be found to establish this.

While my title to this particular Patent has past, I am still personally interested enough in it to see that the right sort of treatment is accorded it.

Trusting that you recognize our position in the matter, I am

Yours truly,

JNO L. MILTON.

JLM:SR

201

October 27, 1916.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40-42 E. LaFayette Ave.,
Detroit, Michigan.

Dear Sir:

We have come to the conclusion that the best way to dispose of the Milton-Kane Interference is to introduce proofs, so far as possible, on behalf of both parties and put it up to the Patent Office to decide as to who is entitled to a patent containing the claims involved in the interference. We shall wish shortly to take your deposition in support of your side of the interference and shall consider it a favor if you will advise us rather promptly as to the earliest date within the next two weeks when it will be possible for you to give your deposition. The matter should not require more than a couple of hours of your time at the most.

Unless you can think of a better place to take your deposition we shall expect to take your testimony at the Poncha-train.

As we have some other matters coming up down your way during the early part of next week we shall appreciate your kindness if you can arrange to give your testimony either Tuesday or Wednesday. Will you kindly wire us collect as to what day will best suit your convenience?

Yours very truly,

202

Motor Ignition & Devices Co.
40-46 East Lafayette Avenue
Detroit, U. S. A.

October 28th 1916

Williams, Bradbury & See,
Chicago, Ill.

Gentlemen:—

In response to your letter of the 27th, we wired you this morning as follows:—

“Am leaving Detroit Monday or Tuesday for several days. See letter.”

I am under agreement with my associates to be in Cleveland

for Monday Morning, however, owing to the fact that the factory is entirely torn up for a move to Cleveland, I am so busy that I am not be able to get away Monday and accordingly have planned to leave Tuesday. Even if I should be here all day Tuesday, I would not be able owing to the condition just mentioned.

I have advised your office regarding this move. You no doubt realize that moving a plant, office and our entire work to another city is a very serious, trying undertaking.

This being my position I can not see how it will be possible for me to give you my deposition in a week or ten days.

I am not moving my home at the present time and no doubt I can arrange to meet you here in Detroit some time later on in the month. Trusting this will be satisfactory and regretting that I can not accommodate you on the proposed date, I am

Yours truly,

MOTOR IGNITION & DEVICES COMPANY

JNO. L. MILTON.

JLM:SE

203 (Western Union Telegram Heading.)

Received at Jackson Boulevard and La Salle St., Chicago. Always open

1916 Oct 28 AM 8 27

C15De 12 Coll

Fy Detroit Mich 915A 28

William Bradbury and See

X 48

1315 Monadnock Bldg Chicago Ills

Am leaving Detroit Monday or Tuesday for several days
See letter

J. L. MILTON.

204

December 1, 1916.

Mr. John L. Milton,

c/o Motor Ignition & Devices Co.,

40-42 LaFayette Ave.,

Detroit, Michigan.

Dear Sir:

The time in which to take testimony in your behalf in the Milton vs. Kane Interference has now expired and Kane's time for the taking of rebuttal proofs has commenced to run. In view of the numerous extensions of time heretofore granted in this interference the Patent Office has indicated that it

will not grant further extensions. Therefore, if we are to take testimony in your behalf it will be necessary to do so before December 15th, or, in other words, before the expiration of Kane's time for introducing rebuttal proofs. We can stipulate that your testimony may be taken during Kane's time without resetting the date for final hearing. You will, therefore, see that if we are to take your testimony the matter must be given immediate attention. Will you kindly advise us at your earliest convenience whether or not you can see your way clear to give this testimony before December 15th, as outlined above?

Yours very truly,

205

(Letterhead of The Teagle Company.)

Cleveland, O. Dec. 5, 1916.

Williams, Bradbury & See,
Chicago, Ill.

Gentlemen:

The proposition of moving our Factory and my house-hold affects has been a very big undertaking and accordingly has consumed all of my time. Even tho I have not finished with this work, I am leaving tonight or not later than tomorrow for New York to be absent until next week. If it is possible to arrange to give my testimony before Dec. 15th—I will most certainly do so.

Yours truly,

JNO. L. MILTON

Per.....

M(S

206 AGM:KH

December 18, 1916.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40-42 E. LaFayette Ave.,
Detroit, Michigan.

Dear Sir:

Under date of December 1st we wrote you with reference to taking your testimony in the Milton vs. Kane Interference and under date of December 5th you advised us that if you could possibly do so you would endeavor to give your testimony before December 15th. That date has now passed and the only way in which your testimony may be taken and used will be to stipulate that it may be taken nunc pro tunc as of an earlier date. If you can arrange to give your testimony

within the next week or ten days we are hopeful that it will not be too late to be of value. Will you, therefore, kindly advise us immediately whether or not you can see your way clear to attend to this matter within that time.

Yours very truly,

207 (Letterhead of The Teagle Company.)
Cleveland, O. Dec. 26, 1916.

Williams Bradbury & See,
719 Monadnock Block,
Chicago, Ill.

Gentlemen:

The strain of breaking up our Factory and Office as well as its organization and trying to re-organize my home during the past two months has proven more than I could stand. Last Monday, week ago, I left the office and have been ill and unable to attempt to do any work until this morning.

I find your letter of Dec. 18th, which I regret has remained un-answered. Even tho there has been volumes of important work unfinished during this move and still is, I will make a special effort to give you the testimony for which you have asked. I have not and will not have an opportunity to go thru any of my records, so I would ask your representative to bring with him the records, whihe we went over when I was in your Office in Chicago, these will serve to refresh my memory on the subject.

I would suggest that the testimony be taken in the afternoon and to have a preliminary conference in the morning of a given day. I do not know the significance or ethics of the taking of a testimony at a later date and as of an earlier date as you suggest. Before giving the testimony I will get enlightenment on the subject.

I regret that it has been physically impossible for me to to try to attend to the business demands of my own Company, and still to have not found time to serve you in this matter.

Yours truly,

JNO. L. MILTON

M(S)

AGM:KH

December 27, 1916.

Mr. John L. Milton,
c/o The Teagle Company,
1125 Oregon Ave.,
Cleveland, O.

Dear Sir:

We are in receipt of your letter of December 26th and are very sorry to learn that you have been ill. We are very glad to know, however, that you are now able to get back to matters of business.

We note that you will, in all probability, be able to give your testimony in the Milton-Kane Interference within a week or so. Almost any day that will suit your convenience will be all right with us. We should, however, take care of the matter rather promptly and we would suggest that you give your testimony just as soon after January 2nd as you possibly can. We think your suggestion that a conference be had in the morning, testimony to be taken in the afternoon, is a good one and we shall arrange to be in Cleveland early in the morning on the day you are to give your testimony.

Trusting that you will advise us promptly as to the date that will best suit your convenience, we are

Yours very truly,

RMS:KH

2/5/19
F. W.
May 12, 1916.

Mr. Wm. Kroeplin,
3116 Prytania St.,
New Orleans, La.

Dear Sir:

We have just learned from Mr. Bowden of the Webster Manufacturing Company that you are at the above address and that you would not be back in Chicago for some time and so we must ask you by letter what we had desired to talk with you about.

The Webster Electric Company is involved in an interference between the Milton patent No. 1,096,048 and an application for patent filed by Edmund J. Kane, but the Webster Company has subsequently purchased the Kane application so that it now owns both the Milton patent and the Kane application and the invention which is shown in both. There remains the question, however, of deciding, as a matter of law, whether the Webster Company should claim the invention through the Milton patent or through the Kane application and we have been endeavoring to learn from the men who were with the company in 1909 when this invention seems to have been made what the facts are.

The specific point involved is the substitution of direct contact between the yoke on the magneto shaft and the adjustable screw threaded in an arm on the movable electrode shaft, in place of the old line construction, also the mounting of the generator and the spark plug in a unitary structure which can be installed on an engine and removed without destroying the adjustment between the electrodes and the generator.

We will appreciate it very much indeed if you will think this proposition over and write us at your earliest convenience as fully as you can anything that you think may throw any light on the design of this construction both as to when it was done and by whom it was done. Mr. Milton told us that you had made many of the sketches which served as a basis for patent office drawings and perhaps you may have some of those sketches or some notes or remembrances concerning them.

Our time to act in this matter is short and we would like to have you reply as soon as possible.

Yours very truly,

212

PLAINTIFF'S EXHIBIT 68B

2/5/19 F W

New Orleans 5/15/16.

Williams, Bradbury & See

Chicago Ill

Gentlemen:—

In answer to your letter of the 12th regarding the patents owned by the Webster Electric Co. I do not have any prints of the drawings and sketches I made of details for the mag-

neto. I never knew that Mr. Kane made any application for patent on an attachment of the Milton Magneto. The substitution of parts you refer to in your letter must have been made after I left the Webster Electric Co at Tiffin Ohio as I can not recall any of the changes referred to.

If you would send me a sketch of the attachments in question, or catalogue cut marking out the parts; I may remember some of the changes. I will answer any other questions you may desire.

Yours Very Truly

WM. A. KROEPLIN

213

PLAINTIFF'S EXHIBIT 68C

RMS:KH

2/5/19

F.W.

May 18, 1916.

Mr. Wm. A. Kroepelin,
3116 Prytania St.,
New Orleans, La.

Dear Sir:

We have your letter of May 15th, and in answer we enclose a catalogue showing the construction the original design of which we are interested in.

Referring to Figures 2 and 3 on page 3 and to Figure 5 on page 5 you will note that the spark plug is mounted in a plate to be attached to the cylinder; that this plate carries an integral bracket or support which forms a bearing for the inductor shaft and by which the generator and other parts co-operating with it are supported; and that the electrode shaft carries an arm in which is mounted an adjustable screw to be struck by one arm of the yoke on the inductor shaft.

Our information, gathered from several witnesses, is that before this compact structure was designed and its manufacture commenced the company was building a structure in which the generator and its trip were supported on a boss along the side of the cylinder considerably removed from the spark plug; and that an arm on the inductor shaft was connected with an arm on the electrode shaft in the spark plug by a long rod or link. It is the designing of this new structure illustrated in the catalogue and the change to this
214 structure from the old one just referred to in which we are especially interested.

Even if you haven't any of the sketches, letters, or other written data relating to this matter we will appreciate it very much if you will write us fully anything that you may remember tending to show who may have designed this.

Your prompt reply will be greatly appreciated and we must also ask you to return this catalogue as it is the only copy we have.

Yours very truly,

Enclosure.

215

PLAINTIFF'S EXHIBIT 68d.

New Orleans 5/20/16.

Williams Bradbury & See

Chicago Ill

Gentlemen:—

In answer to your letter of the 18th regarding the Milton Magneto. The attachments you refer to in your letter and as shown in the catalogue which I am returning herewith must have been made after I left the Webster Electric Co. in the year 1909. In fact I am sure they were because I visited the Webster Electric Co. plant a year or so after I left them and noted improvements on the machine. I do not know who designed these new attachments.

I know of no other information that I can give you relating this machine.

Yours very truly

WM. A. KROEPLIN

218

PLAINTIFF'S EXHIBIT 74.

Tiffin Malleable Iron and Chain Co.

H. L. Waterbury, Prest.

T. K. Webster, Jr. Treas.

A. W. Bass, Secy.

Tiffin, Ohio Sept. 9th 08

Dear John—

I certainly hope your inventive genius will help you out in the Cadillac proposition. We are playing for big stakes. It will mean if we win \$18000 per year for you, and put us all on easy street so we must not fail. I just called up Mr.

Leland on the Phone and he will write you about the Engine today. I hope you take good care of yourself as your thinking machine is so much better when the stomach is right.

Yours truly

T. K. WEBSTER

PLAINTIFF'S EXHIBIT NO. 75.

(Postal Telegraph Telegram.)

Received at

18 CH. FT FA. 13 Collect 907a 664 S. Halsted St., Chicago.
(Where any reply should be sent.)
Telephone Canal 1385.

New York May 7-09
The Webster Mfg. Co.
Chgo. Ill.

Got the magneto on car last night made its initial run satisfactorily.

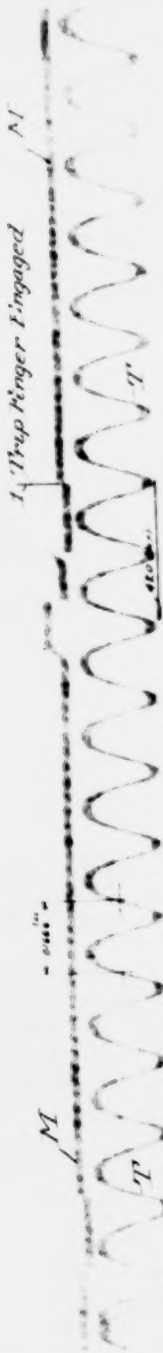
T. K. WEBSTER.

Original delivery of this telegram was made by telephone.

Gallogram b Defendants Device Type '3

← 1 inch = .0267 seconds

1 inch
Electrodes Separated
3.1 Trip Finger Released



Start

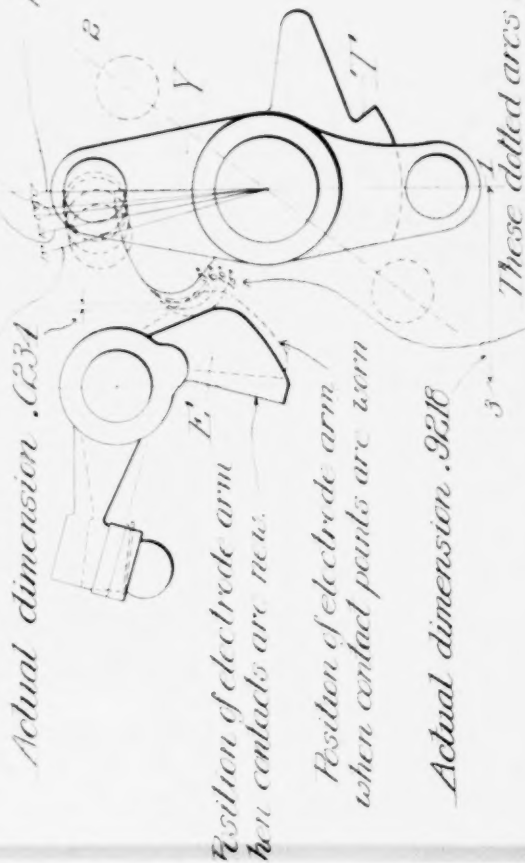
2.34 Amps
1.52 Amps
0.46 Amps

WESTERN ELECTRIC CO
WALLINGFORD, CT
DEC 27 1954

Maximum power is obtained from the
 engine between these two striking
 positions of the yoke.

Position of yoke when striking
 electrode arm with new contacts.

Actual dimension .6234

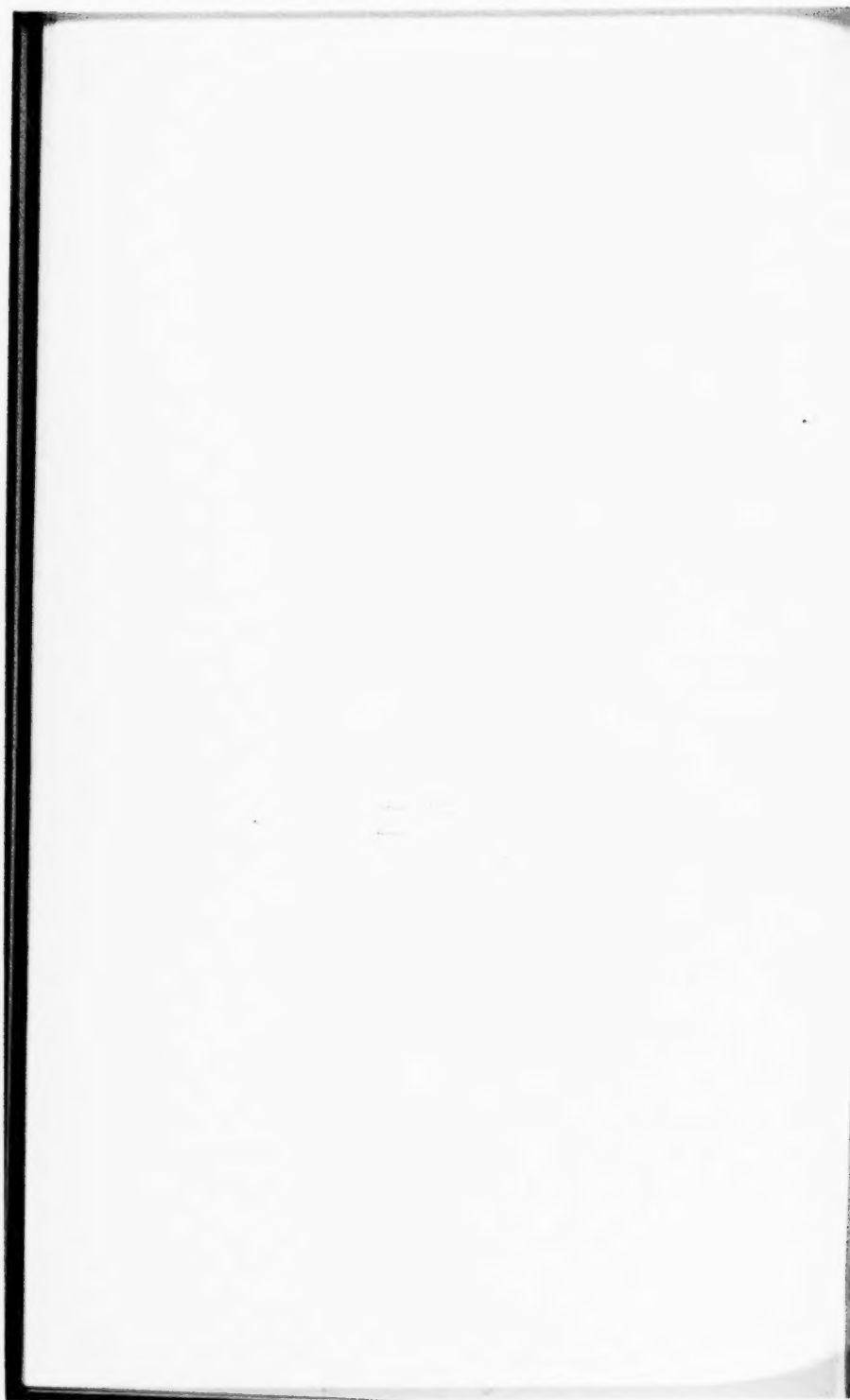


Position of electrode arm
 when contacts are new.

Position of electrode arm
 when contact points are worn

Actual dimension .9216

These dotted lines represent the
 engaging surface of the rotor arm
 in the several striking positions.



223

PLAINTIFF'S EXHIBIT 80.

Trust Agreement.

This Agreement, made and entered into this 11th day of December, A. D. 1915, between John L. Milton, formerly of Louisville, County of Jefferson, and State of Kentucky, and now a resident of Detroit, Michigan, party of the first part, and Webster Electric Company, a corporation organized and existing under and by virtue of the laws of the State of West Virginia, and formerly having its principal place for doing business in the City of Tiffin, County of Seneca, and State of Ohio, and now having its principal place for doing business in the City of Racine, Wisconsin, party of the second part, Witnesseth: That

Whereas, the parties hereto did on the tenth day of April A. D. 1912, enter into a certain escrow agreement, copy of which is hereto attached and hereby made a part hereof, under which escrow agreement the said John L. Milton executed a certain blank assignment of the whole right, title, and interest in and to his inventions and improvements disclosed in the following named United States Letters Patent and applications for patents, and in and to the following United States Letters Patent and applications for patent:

| Case | Serial No. | Filed | Allowed | Issued | Improvement |
|------|------------|----------|---------|---------|---|
| 1 | 307,391 | 3/22/06 | 11/5/09 | 5/31/10 | Electric Gen- #959,954 erators. |
| 2 | 357,041 | 2/12/07 | | | Inductor Gen- erators. |
| 3 | 379,485 | 6/17/07 | | | Inductor Gen- erators for Ig- nition Purposes |
| 5 | 443,608 | 7/15/08 | | | Magneto Igni- tion Apparatus |
| 224 | | | | | |
| 9 | 475,171 | 1/30/09 | | | Apparatus and Method for Generating Al- ternating Cur- rents. |
| 10 | 589,654 | 10/28/10 | | | Magneto Gen- erators, |

which said assignment was dated the tenth day of April, A. D. 1912, a copy of which is hereto attached and hereby made a

part hereof, and which said assignment was delivered to Lynn A. Williams, of Chicago, Illinois, who, on the tenth day of April 1912, accepted the escrow hereinabove referred to, and who consented and agreed to act as escrow in accordance with the terms of the said escrow agreement of April 10, 1912; and

Whereas, in the said blank assignment said John L. Milton sold, assigned, and transferred all rights and causes of action and suit resulting from infringements of the said patents which may have occurred at any time during the life of said patents; and

Whereas, it is the desire of the said Webster Electric Company to have recorded in the United States Patent Office an assignment of the said inventions, patents, and applications for patents; and

Whereas, it is the desire of the parties hereto to establish a Trust under which the parties hereto shall be the beneficiaries and under which the said Webster Electric Company may put itself in position to maintain suits and actions for infringements of the said patents, and of the said John L. Milton to secure the payment of certain promissory notes referred to in the said escrow agreement;

Now, Therefore, in consideration of the premises and of the mutual covenants and agreements of the parties hereto,

and of One Dollar (\$1.00) in hand paid by each of the 225 parties hereto by the other, receipt whereof is hereby acknowledged, it is mutually agreed as follows:

1. It is mutually understood and agreed that upon his acceptance of the Trust herein created, and upon his agreement to act by and for the said parties hereto as Trustee in accordance with the terms and conditions hereof, the said Lynn A. Williams, of Chicago, Illinois, shall be and is hereby appointed Trustee for the benefit of the parties hereto.

2. The said John L. Milton hereby authorizes and directs the said Lynn A. Williams to supply his name, as Trustee, to the blanks in the aforesaid assignment whereby the said Lynn A. Williams, Trustee, shall become the assignee of the said John L. Milton as to the inventions, patents, and applications for patents therein enumerated.

3. It is mutually understood and agreed that the said Lynn A. Williams shall take and hold the title and interest conveyed to him as Trustee by the said assignment under the terms and conditions of the escrow agreement hereinabove referred to for the benefit of the parties hereto; that the said

Lynn A. Williams, Trustee, shall not execute or deliver any assignment or transfer of any right, title, or interest in or to any of the aforesaid inventions, patents, or patent applications, unless and until the promissory notes referred to in the aforesaid escrow agreement shall have been paid by the said Webster Electric Company to the said John L. Milton, or his order, or unless or until there shall have been a default in the payment of one or more of the said notes, as in the said escrow agreement provided for; that upon 226 proof of the payment of all of the said notes by the said

Webster Electric Company to the said John L. Milton, or his order, the said Lynn A. Williams, Trustee, shall and is hereby authorized to execute in favor of the said Webster Electric Company, or its nominee, an assignment of the whole right, title, and interest in and to the said inventions, patents, and applications for patents, in the terms substantially identical with those of the aforesaid assignment executed by the said John L. Milton under date of April 10, 1912; that in the event of a default on the part of the Webster Electric Company in meeting or paying any of the aforesaid notes when due, and upon proof of such default, the said Lynn A. Williams, Trustee, shall notify the said Webster Electric Company of the said default and if within fifteen (15) days thereafter the said Webster Electric Company shall not have made payment to the said John L. Milton of any and all notes theretofore matured and with interest, as in the notes provided, then the said Lynn A. Williams, Trustee, shall upon ten (10) days' notice in writing to the said Webster Electric Company and the said John L. Milton sell to and execute in favor of the highest bidder an assignment of the whole right, title, and interest in and to the said inventions, patents, and applications for patents in terms substantially identical with those of the aforesaid assignment executed by the said John L. Milton under date of April 10, 1912, and shall apply the proceeds of the said sale to the payment to the said John L. Milton, or his order, of any and all of the said notes remaining unpaid by the said Webster Electric Company at the time of such sale and shall turn over to the said Webster Electric Company the remainder of the proceeds of such sale, if any.

227 4. It is mutually understood and agreed that the said Lynn A. Williams, Trustee, shall be and hereby is authorized to commence and maintain in his own name, and if necessary or desirable in the names of the parties hereto,

as beneficiaries under the trust hereby created, any and all such actions at law or suits in equity against infringers of any or all of the aforesaid patents, or the patents which may have resulted or which may result from the filing and prosecution of the patent applications aforesaid, provided, however, that all such actions at law or suits in equity shall be commenced and maintained only at the instance of the said Webster Electric Company and that any and all such actions or suits shall be directed and controlled by the Webster Electric Company and that the expenses and costs of any such action or suit shall be borne entirely by the said Webster Electric Company and in no event and in no part by the said John L. Milton, and provided also that any and all recoveries of damages, profits, costs, or otherwise, as a result of any and all such suits shall inure to the benefit of the said Webster Electric Company.

In Witness Whereof, the parties hereto have hereunto set their hands and seals, the said Webster Electric Company by its duly authorized officers, as of the day and year first above written.

JOHN LEWIS MILTON (Seal)
WEBSTER ELECTRIC COMPANY,
By WALTER BROWN
Vice President.

(Seal)
Attest:

S. W. LOEB
Secretary.

228

Acceptance of Trust.

I, Lynn A. Williams, of Chicago, Illinois, hereby accept the Trust herein and hereby created and consent and agree to act as Trustee in the aforesaid matter in accordance with the terms and conditions of the above agreement.

Dated at Chicago, Illinois, this 11th day of December, 1915.
LYNN A. WILLIAMS

229

Escrow Agreement

This Agreement, made and entered into this 10th day of April, A. D. 1912, between John L. Milton of Louisville, in the County of Jefferson, and State of Kentucky, party of the first part, and Webster Electric Co., a corporation organized and existing under and by virtue of the laws of the State of West Virginia, and having its principal place for doing busi-

ness in the City of Tiffin, County of Seneca, and State of Ohio, party of the second part,

Witnesseth: That

Whereas, said party of the second part is indebted to the party of the first part in the just and true sum of Fifteen Thousand Dollars (\$15,000.00) as evidenced by Seventy-five (75) promissory notes, for the amount of Two Hundred Dollars (\$200.00) each, and each bearing interest at the rate of five (5%) per cent. per annum from and after the first day of May, A. D. 1913: the said notes being payable at intervals of one month beginning on the first day of May, A. D. 1913, the said notes having been signed by the party of the third part, by its duly authenticated officers and having been made payable to the order of the party of the third part, and having by agreement been turned over to Lynn A. Williams, a resident of the City of Evanston, in the County of Cook and State of Illinois, for the benefit of the party of the first part hereto; and

Whereas, the said party of the second part is desirous of securing to the party of the first part the payment of each and all of said notes at or before its maturity; and

Whereas, in order to furnish security for the payment of the said note to the order of the party of the first part, said parties hereto are desirous of placing or having placed in escrow a certain assignment of certain inventions and

Letters Patent and applications therefor of said party 230 of the first part, which said assignment is to be held and delivered by the escrow holder, as mutually agreed and subject to certain conditions hereinafter specified;

Now, Therefore, in consideration of the premises and of One Dollar (\$1.00) by each in hand paid to the other and receipt whereof is hereby acknowledged,

It Is Agreed As Follows:

1. That the original assignment heretofore mentioned, duly executed by the party of the first part and a copy of which is attached hereto for purposes of reference, and as such made a part hereof, shall be delivered to, held by and remained in escrow with Lynn A. Williams, of the City of Evanston, County of Cook, and State of Illinois, until said party of the second part shall have paid to the order of the party of the first part each and all of the said notes for Two Hundred Dollars (\$200.00) each and each bearing interest at the rate of five (5%) per cent. per annum from and after the first day of May, A. D. 1913, and which said notes mature on

the first day of May, A. D., 1913, and successively thereafter on the first day of each of the seventy-four (74) months succeeding, to the total amount of Fifteen Thousand Dollars (\$15,000.00) whereupon said escrow holder shall turn over and deliver to the party of the second part the said assignment duly executed by the party of the first part; provided, however, that in the event that the said party of the second part shall fail to pay any of said notes with interest at maturity, and when presented for payment by the said party of the first part, or his order, then said escrow holder, upon being advised in writing of the said default, shall, upon proof of such default, notify the party of the second part in writing of the said default, and if, within fifteen (15) days thereafter the party of the second part shall not have made payment to the party of the first part of any and all notes theretofore matured and with interest as in the notes provided, then
231 the escrow holder shall, upon ten (10) days' notice in writing to the party of the first part and to the party of the second part, sell and turn over to the highest bidder the said blank assignment of patent applications and patents described therein, and shall apply the proceeds of said sale to the payment to the party of the first part or his order of any and all of the said notes remaining unpaid by the party of the second part at the time of such sale, and shall turn over to the party of the second part the remainder of the proceeds of such sale, if any.

In Witness Whereof, the parties hereto have hereunto set their hands and seals, the party of the second part by its duly authorized officers, as of the day and year first above written.

JOHN L. MILTON (Seal)
WEBSTER ELECTRIC Co.
by T. K. WEBSTER
President.

Attest:

EMIL PODLESAK,
Secretary.

Acceptance of Escrow

I hereby accept the original assignment from John L. Milton to Webster Electric Co., referred to in the foregoing original agreement between said parties and consent to act

as escrow in the matter in accordance with the terms of said agreement.

Dated at Chicago, Illinois, this 10th day of April 1912.

LYNN A. WILLIAMS

233 Received and Recorded on the 13th day of December 1915 in Liber D, 99, page 86 of Transfers of Patents.

Original Assignment sent to the Webster Electric Co. on June 28, 1918.

232

Assignment

For and in Consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable considerations, the receipt of which is hereby acknowledged, I, John L. Milton, of Louisville, in the County of Jefferson, and State of Kentucky, do hereby sell, assign and transfer unto Lynn A. Williams, Trustee of Chicago, Illinois, the whole right, title and interest in and to my inventions and improvements disclosed in the following named United States Letters Patent and applications for patent and in and to the following United States Letters Patent and applications for patent:

| Case | Serial No. | Filed | Allowed | Issued | Improvement |
|------|------------|----------|---------|---------|---|
| 1 | 307,391 | 3/22/06 | 11/5/09 | 5/31/10 | Electric Gen- #959,954 erators. |
| 2 | 357,041 | 2/12/07 | | | Inductor Gen- erators. |
| 3 | 379,485 | 6/17/07 | | | Inductor Gen- erators for Ig- nition Purposes |
| 5 | 443,608 | 7/15/08 | | | Magneto Igni- tion Apparatus |
| 9 | 475,171 | 1/30/09 | | | Apparatus and Method for Generating Al- ternating Cur- rents. |
| 10 | 589,654 | 10/28/10 | | | Magneto Gen- erators. |

the said right, title and interest to be held and enjoyed by the said Lynn A. Williams, Trustee, for its own use and behoof and for the use and behoof of its successors and assigns to the full end of the term for which said Letters Patent are

and may be granted, as fully and entirely as the same 234 would have been held and enjoyed by me had this assign-

ment and sale not been made, and I hereby sell, assign and transfer to Lynn A. Williams, Trustee all rights and causes of action and suit resulting from infringements of said patents which may have occurred at any time during the life of said patent and prior to the date hereof, and I further hereby sell, assign and transfer unto said Lynn A. Williams, Trustee, the whole right, title and interest in and to any inventions and improvements relating to Low Tension Ignition Apparatus and System which I have made, and I agree to execute all papers, including formal assignments, which may be necessary or expedient to enable said Lynn A. Williams Trustee to obtain and acquire patents thereon and legal title thereto.

I Authorize and Request the Commissioner of Patents to issue the patents which may be granted on said applications to said assignee for the sole use and behoof of said assignee, its successors and assigns.

In Testimony Whereof, I have signed my name and affixed my seal at Chicago, Illinois, as of the 10th day of April, A. D. 1912.

JOHN L. MILTON (Seal)

State of Illinois }
County of Cook } ss:

Be it remembered that on this 10th day of April 1912, before me, Leonard W. Novander, a Notary Public, duly commissioned, qualified and acting in and for the County and State aforesaid, came John L. Milton, personally known to me to be the identical person whose name is subscribed to the foregoing instrument of writing and acknowledged that he executed and signed the same as his free act and deed for the purposes and consideration therein expressed.

In Witness Whereof I have hereunto set my hand and affixed my official seal the day and year last above written.

LEONARD W. NOVANDER
Notary Public.

237

PLAINTIFF'S EXHIBIT 81.

Wisconsin ex rel Podelsak vs. Webster Electric Co.

May 11, 1917, 10:00 o'clock A. M.

Parties met pursuant to adjournment before said Commissioner.

Present: Mr. Wright, and Mr. Simmons, counsel for defendant; the plaintiff appearing neither in person or represented by counsel.

Mr. Frederick Secord appeared as attorney in behalf of the witness Frederick C. Manning.

FREDERICK C. MANNING, a witness called on behalf of the defendants herein, and residing at Chicago, Illinois, pursuant to a writ of dedimus potestatem issued out of the said District Court of the United States for the Eastern District of Wisconsin attached hereto and returned herewith, being duly cautioned and sworn to tell the whole truth, and being carefully examined upon oral interrogatories, deposes and says as follows:

Direct Examination by Mr. Wright.

Q. What is your name, please?

A. Frederick C. Manning.

Q. Where do you reside?

A. My residence is 3631 Pine Grove Avenue, Chicago.

Q. What is your business?

A. I am manager of the Sumter Electrical Company, Chicago.

238 Q. Are you an officer of the Sumter Electrical Company?

A. Yes, sir; I am president.

Q. What company do you refer to—what is the official title of that company?

A. It is just as I stated it here—Sumter Electrical Company.

Q. Under what State is it organized?

A. A corporation of Illinois.

Q. You are now the president of the Sumter Electrical Company organized under the laws of the State of Illinois?

A. Correct.

Q. When was that company organized?

A. I think it was during October of 1915, as well as I remember.

Q. Haven't you got a good memory?

A. Fairly.

Q. Well, then you know, don't you, when that company was organized, you being its president?

A. Not without referring to the records; no, sir.

Q. You cannot tell within a month when it was?

A. I have stated that it was, as near as I remember, October, 1915.

Q. What was your business prior to that time?

A. I was vice president and secretary of the Sumter Electrical Company of Sumter, South Carolina.

Q. When did that company go out of business?

A. I could not tell you.

Q. Did it go out of business at about the same time that you became president of the Sumter Electrical Company of Illinois?

239 A. Afterwards.

Q. When did it vote to go out of business?

A. I don't remember.

Q. Were you an officer of that company?

A. Was I an officer?

Q. Yes.

A. Yes, sir.

Q. What was your office that you held?

A. Just as I have stated here—vice president and secretary.

Q. Up to the time it went out of business?

A. Yes, sir.

Q. So you mean to say that as vice president and secretary of that company you do not recall when it went out of business?

A. No, sir.

Q. You don't recollect when it voted to go out of business?

A. No, sir. Those facts can be very easily established, but I don't remember the dates.

Q. Who has the books of this Sumter Electrical Company of South Carolina?

A. I couldn't tell you.

Q. You were the secretary of the company when it went out of business?

A. Yes, sir.

Q. And as such you held possession of those books?

A. Personally I did not.

Q. Who did?

A. They were retained at the office of the Sumter Electrical Company in South Carolina.

Q. Where, at Sumter?

A. Yes, sir.

Q. And that is where they are now, so far as you know?

A. That is where they are now so far as I know, there.

240 Q. Do you know Henry J. Podlesak?

A. Yes, sir.

Q. When did you first meet him?

A. Some five or six years ago, I suppose.

Q. Do you know Mr. Kratsch?

A. Yes, sir.

Q. What is his position?

A. He is treasurer of the Sumter Electrical Company of Illinois.

Q. Was he appointed treasurer of that company at the same time that you were appointed its president?

A. Yes, sir.

Q. What was his position with reference to the Sumter Electrical Company of South Carolina?

A. He was a salesman.

Q. Did he hold any office under that organization?

A. No, sir.

Q. Did Mr. Kratsch have any correspondence with you with reference to Mr. Podlesak subsequent to, say, the 1st day of May, 1915?

A. I don't remember.

Q. Your memory is not good as to any correspondence that you may have had with Mr. Kratsch with reference to Mr. Podlesak?

A. No, sir.

Q. Where were you living on or about the 4th day of August, 1915?

A. I was living in Chicago.

Q. On or about the 4th day of August or shortly prior thereto did you send for any representative of the Sumter Electrical Company of South Carolina to meet you in Chicago and discuss with you the question of purchasing any patents or rights thereto from Henry J. Podlesak?

241 A. I did, but I don't remember whether that was the

date. I remember distinctly that the gentleman came here to discuss that matter with me.

Q. Who was he?

A. Mr. H. R. Van Deventer.

Q. What was the position which he held with respect to the Sumter Electrical Company of South Carolina?

A. Why, he was—I am just trying to remember whether he had any official connection with the organization. I don't think he did. He was a patent attorney in a sense, and assistant to myself there for a great many years.

Q. Assistant to yourself, you say—you mean when you were in Sumter, South Carolina?

A. When we were in Sumter, yes, sir.

Q. And not only in the employ of the Sumter Electrical Company—

A. Yes, sir.

Q. —he was likewise in the employ of that company as its attorney, was he?

A. Not exactly as its attorney. He grew up in the organization, and he became active in its patent affairs.

Q. Then he was a stockholder and officer—is that what you mean?

A. He was not an officer, I say.

Q. Well, what was his relation to the company so that he grew up with it?

A. An employee.

Q. What was the nature of his employment?

A. Office work, sales work, engineering work and the patent work.

242 Q. Then he was employed in the office of that company, you mean to say, as a patent attorney?

A. I don't know that he was employed as a patent attorney, but he did work of that character and was a patent attorney.

Q. And was in the employ of the Sumter Electrical Company?

A. Yes, sir.

Q. And didn't do anything else but work for the Sumter Electrical Company?

A. I think he did; yes, sir.

Q. Please answer the question.

A. Yes, sir; he wrote a book on telephony, I remember is one thing he did.

Q. Was he engaged in any other occupation, or was he

employed by any other person than the Sumter Electrical Company of Sumter, South Carolina?

A. Not that I know of.

Q. Then he was employed exclusively by that company?

A. So far as I know.

Q. Well, don't you know?

A. No.

Q. Were you an officer of that company?

A. Yes.

Q. Don't you know whether your employee is in your employment or not?

A. Well, when he is doing my work, that is all I am interested in.

Q. What work was he doing for you?

A. Just what I have stated above there in my testimony.

Q. Well, state it.

A. Well, he was doing some patent work, engineering work, sales work, catalogue work. I suppose that is sufficient.

243 Q. Was he under your direction?

A. Not entirely.

Q. Under whose direction was he?

A. Well, various officers there. He was not under the direction of any one in particular, but most of his work was done in co-operation with myself.

Q. Was he an electrical engineer?

A. I would consider him an electrical engineer; yes, sir.

Q. And an expert along the line of electrical development and investigation?

A. Well, that is a rather broad term; but I think he is an electrical expert.

Q. Well, you considered him an expert so that you desired to have him take charge of your expert electrical work in your company, of which you were at that time vice president, didn't you?

A. No, he didn't do that at all. He assisted.

Q. What?

A. I stated that he assisted in work of that kind. His work was varied.

Q. Was there any other electrical engineer there besides Mr. Van Deventer?

A. Yes, sir.

Q. Who was he?

A. Mr. C. T. Mason.

Q. Was Mr. Mason the subordinate or the superior of Mr. Van Deventer?

A. Superior.

Q. What was his position?

A. President of the company.

Q. Well, he was not employed then as an electrical expert, was he?

A. Who.

244 Q. Mr. Mason.

A. Mr. Mason was the chief engineer of the company.

Q. And also president?

A. Yes, sir.

Q. Was Mr. VanDeventer or was he not a stockholder of the Company?

A. I don't think he was at that time.

Q. You were secretary of it?

A. Yes, sir.

Q. And you don't know?

A. I don't know.

Q. When you wanted to have anybody come in here to Chicago to give you some advice with reference to inventions you sent for Mr. VanDeventer?

A. I don't remember just how that came about; but I know that I wanted Mr. VanDeventer here at that time.

Q. Because he was an expert to advise you?

A. Yes, because he knew more about the matters that I had under consideration than anyone else.

Q. What matters do you refer to when you speak that way?

A. To the matters that you referred to a minute ago when I asked these gentlemen to come here for a conference.

Q. That is, the patents that were owned by the Podlesak brothers, and he knew all about them?

A. I don't know whether he knew all about them.

Q. Well, he knew more than you did?

A. Yes, sir.

Q. And he was the employee of the Sumter Electrical Company of South Carolina who knew the most about them?

A. I don't know that.

245 Q. Well, you sent for him?

A. Yes, sir.

Q. And you sent for him to advise you as an officer of that company with reference to the Podlesak patents—is that true?

A. Yes, sir.

Q. I have before me a little brochure containing seventy-one pages. It bears upon the cover the legend—

A. Let me interrupt you one minute right here. I have made a definite statement here which I want to modify: You asked me if I sent for Mr. VanDeventer to come here and give me certain information. Well, I cannot say that I sent for Mr. VanDeventer. I think Mr. VanDeventer came here as the result of some correspondence or something of that kind. I don't think I sent for him to come here; so I want to make that point clear. I don't know what you are getting at, but I don't want to be misunderstood in the matter.

Q. Then he was sent by somebody in authority down there, in reply to your letters?

A. No, he may have come of his own accord.

Q. But he came to meet you?

A. Yes, sir.

Q. And you two gentlemen proceeded to take up the Podlesak negotiations for these patents?

A. Well, not only we two gentlemen; there were others.

Mr. Wright: What was that answer?

A. (Read by the Commissioner)

Q. What others?

246 A. Mr. Clement, Edward E. Clement, of Washington.

Q. Who was he?

A. He is an attorney there associated with Mr. VanDeventer in the patent work.

Q. Then he has acted for the Sumter Electrical Company of South Carolina with reference to their patent litigation?

A. Yes, sir.

Q. He is thoroughly familiar—he was at that time thoroughly familiar with the patent litigation and the field covered by the patents of the Sumter Electrical Company of South Carolina, was he?

A. He was handling their patents. I don't know how familiar he was with any of them.

Q. Well, you were an officer of the company?

A. Yes, sir.

Q. He would not have been handling their business if he was not familiar with them, would he?

A. Well, that matter was up to Mr. VanDeventer and Mr. Mason. I didn't pay attention to that at all.

Q. Was there any other patent attorney besides those gentlemen who was connected with Mr. Clement?

A. Not that I know of.

Q. How did he come on at just the moment that Mr. VanDeventer left South Carolina and came up here to see you?

A. He came with Mr. VanDeventer.

Q. Then he went from Washington to South Carolina and then came from South Carolina with Mr. VanDeventer to Chicago?

A. I don't know.

247 Q. Well, they were together when they came here, were they?

A. That is what I said; yes, sir.

Q. Well, is it true that they were together when they came here?

A. That is what I said; yes, sir.

Q. You did not say it.

A. You asked me—

Q. I want to have you say it. If you take your hand down from your mouth and answer these questions we will get along better. Now, were they together or were they not when they came to Chicago?

A. I could not tell you.

Q. Where did they meet you?

A. At my—I was going to say at my office, but I don't remember; possibly it was at the hotel.

Q. They were stopping at the hotel here in Chicago?

A. Yes, sir.

Q. Where?

A. At the Great Northern.

Q. And when they got here they sent for you?

A. I don't remember.

Q. Well, did you go there?

A. I presume I did.

Q. Well, do you know whether you went there and met those two men?

A. I know I was there with them at the Great Northern Hotel.

Q. At their room?

A. Yes, sir.

Q. You three gentlemen?

A. Yes, sir.

Q. And you immediately began to confer with reference

to the purchase of these patents of Henry J. Podlesak
248 by the Sumter Electrical Company of Sumter, South
Carolina?

A. I presume we did.

Q. Do you know whether you did or not?

A. Well, that is what they came here for, and I presume
we immediately proceeded to—

Q. Why do you say "presume"?

A. Because you ask me to make a definite statement, and
I cannot swear to something I do not know definitely.

Q. You were there talking to those two men?

A. Yes, but how do I know that we "immediately" began
to discuss that question?

Q. That is all you went there for?

A. Absolutely.

Q. Did you discuss any other matter?

A. I don't know.

Q. You seem to testify in a hostile spirit.

A. Not a bit in the world, sir, I am here to tell you abso-
lutely anything in the world that I know. In the first place
I would like to know what suit this is I am testifying in.

Q. You don't know anything about it! I don't have to
answer because I am not a witness.

A. I understand that.

Q. And you will learn what is proper for you to learn.
Your province now is to answer questions. Do you under-
stand that?

A. Yes, sir.

Q. Do you understand that you are here under the process
of the United States Court to answer questions?

A. That is what I understand.

249 Q. Do you propose to do that?

A. Yes, sir, absolutely.

Q. Then I will inform you in proper terms what is neces-
sary for you to know to conduct this examination.

A. All right, sir.

Q. Do you have to indulge in any process of reasoning
and say "We probably did this" and "We probably did that"
when I ask you a direct question in reference to any of these
matters?

A. I would prefer to if I do not remember the matter well
enough to make a definite reply.

Q. Do you remember going to the room and meeting these
two men?

A. I do.

Q. Do you remember that at once you began to talk about the Podlesak matter and the purchase of the patents from them by the Sumter Electrical Company of Sumter, South Carolina?

A. We discussed that matter; yes, sir.

Q. There was no "probably" about it?

A. None whatever.

Q. Then why, a few moments ago, did you say "probably"?

A. Because you asked me if we had immediately discussed this matter.

Q. Which is the same question that is asked you again.

Mr. Wright: Please read it.

(The question referred to was read by the Commissioner)

Mr. Wright: The word "at once" was put in the second question, and it was "immediately" in the prior question.

250 A. Well, I did not intend to reply that we at once began to discuss that question, because I don't know that.

Q. Then the only reason that you said "probably" the first time was because there was the words "at once" in there or "immediately"?

A. That is it exactly.

Q. Then you mean to say that when you went to that room and talked with those two men, you went there to talk and did talk about the purchase by the Sumter Electrical Company of South Carolina of those patents owned by the Podlesak brothers?

A. Yes, sir; we did.

Q. Do you know that it has taken me five pages getting you to say that?

A. Well—

Q. Do you know that?

A. Well, you didn't put the word "immediately" in this last.

Q. Well, you are sparring with me?

A. Not a bit.

Q. Whether it should be a little word here or there or the other place. Is that the point?

A. Not at all, sir. I am just here to tell you the facts as I know them.

Q. Yes. Well, now, let's get down to the examination and

have it, and don't let us take up pages with reference to what you might call a verbal sparring. Did you hear me say that?

A. Yes, sir.

Q. Now, a few moments ago you said there was some
251 correspondence that brought these gentlemen to Chicago
to a room in a hotel where you went to meet them. Did
you not so state?

A. Yes, sir.

Q. Do you know anything about that correspondence?

A. There was such correspondence.

Q. Who wrote the letters to the Sumter Electric Company
at Sumter, South Carolina, with reference to this matter, did
you?

A. Yes, sir.

Q. Did Henry Podlesak?

A. No, sir.

Q. Do you keep a file of those letters?

A. Yes, sir.

Q. Where are they?

A. I presume they are at my office.

Q. Do you know whether they are there or not—That lit-
tle word "presume" now comes in again.

A. Well, now, sir, I have not seen those letters since that
time, and I don't know whether they are there. They ought
to be there.

Q. That is the proper place for them?

A. Yes, sir.

Q. I would like to have you produce those letters at the
hearing this afternoon. Will you do so?

A. If I can locate them; yes, sir.

Q. Will you do so without the further process of this
Court?

A. I would like to ask my attorney about that.

Mr. Secord: Yes, sir.

A. Yes, sir.

Q. Who is your attorney?

A. Mr. Secord.

252 Q. Is he your personal attorney?

A. Yes, sir.

Q. You conceive that it is a prudent thing for you, as a
witness appearing in response to a process of the Federal
Court, to have your personal attorney here present to advise
you as to whether you shall or shall not do a certain thing?

A. I thought it was best to do that; yes, sir.

Q. Why?

A. Because I did not know what I was a witness for. I wanted to have my attorney here to advise me if there were any questions that I didn't understand how to answer.

Q. You think I am not competent to make you understand the questions, and you brought somebody here to prompt you and advise you?

A. I don't know that you enter into it at all.

Q. Anybody that was cross examining a witness and cannot make the witness understand, you think that the witness should have some attorney sitting by to advise him?

A. I preferred to in this case.

Q. You think that is the proper way to answer questions in a case where you are subpoenaed as a witness, do you?

A. I prefer to have my attorney, yes.

Q. From the fact that you prefer, you think that is the proper way? Why do you spar with me? Do you or do you not think it is proper as a witness to have your attorney present to advise you?

A. I think it is proper.

253 Q. Why didn't you say so? Why didn't you say so before?

A. Well, I thought I said so.

Q. Well, you didn't say so. I want to have my answer now.

(Question and answer read by the Commissioner.)

Q. Do you see any difference in your answer as the question was first put and as read to you, and the answer that you make now to the question last put by me?

A. Will you read that again, sir. I didn't get the question.

Q. (Read by the Commissioner) Don't you see any difference?

A. No.

Q. I will tell you the difference: You preferred to do it when you answered it the first time, and now you say that it is proper; and the difference between the answers is whether you prefer to answer these questions and whether you prefer to do a certain thing with reference to the answering of these questions. Now do you see it?

A. It all seems about the same thing to me.

Q. Are you going to answer these questions the way you prefer, or the right way?

A. I will try to answer them the right way. That is the way I prefer.

Q. Very good. Then that is the same thing. When you prefer to answer a question then you are going to answer it the right way.

A. I want to answer them the right way.

254 Q. Well, stop "wanting" to do it, and do it. There seems to be some hostility between your company and the Webster Electric Company as expressed by your act now. What is that hostility?

A. There is no hostility that I know of at all, sir. I certainly have none toward the Webster Electric Company.

Q. When you three gentlemen came together in this room in the Great Northern Hotel, as you have told, and began talking about Podlesak, what was said?

A. In answer to that question, in which you ask me what was said, I can only tell you in a general way what I remember as having been stated.

Q. That is all I want. Tell me everything that you remember that was said there specifically or in a general way and in your own way.

A. Well, I explained to Mr. VanDeventer and Mr. Clement that the Podlesak brothers, who owned the patents covering the equipment as manufactured by the Webster Electrical Company, were going into the manufacture of these same equipments, the same type of ignition apparatus, and that I did not see the wisdom of allowing another competitor to open up in that field; and as I understood, Mr. Podlesak or the Podlesak brothers had good patents and a license agreement with the Webster Company, which was doing a large business in those devices, that I thought the Podlesak brothers would be willing to dispose of the patents and their connection with the patents, as regards their licenses or con-

255 tracts with the Webster Company; and that in view of the business that the Webster Electric Company was doing and the royalties accruing under those patents, that would be a good investment for our company, as it would accomplish two things: First of all, it would eliminate the competition which was about to develop as a result of the Podlesak brothers going into that business; and the royalties accruing under the license that the Webster people were operating under would result in a good investment—I mean a good return on the investment for the purchase of those patents. Then the matter was taken up by Mr. Clement, and on his

recommendation that the patents were good and that the license agreements were good, the Sumter Company of South Carolina and the Splittdorf Electrical Company of New Jersey bought those patents and acquired title thereto, as I understand it, and the Webster contracts and so forth.

Q. When was that?

A. That was at the time that I met Mr. VanDeventer and Mr. Clement at the Great Northern Hotel.

Q. When?

A. I think it was in August of 1915.

Q. Were Henry Podlesak and his brother Emil Podlesak present at this talk?

A. Yes, sir.

Q. Did they come in after you got there, or were they there when you got there?

A. I don't remember that. I think they came afterward.

Q. Then you must have talked with those two gentlemen prior to the time that they got there?

A. To Mr. Henry Podlesak.

Q. Didn't you talk prior to the time that Mr. Emil Podlesak got there?

A. No, sir; I never had any discussion with Mr. Emil Podlesak on the subject.

Q. On this occasion then he was not there?

A. Yes, sir; on this occasion he was there, which was the first time that I remember ever having conferred, or that Mr. Emil Podlesak was personally into the transaction at all, at that meeting at the Great Northern Hotel.

Q. And he was there then?

A. He was there then, yes.

Q. I will go back and ask you: Did you have any talk with those two gentlemen before the two Podlesak brothers arrived?

A. Oh, when you said "two gentlemen" a minute ago, I thought you were referring to the two Podlesak brothers.

Q. All right. Now modify your statement if you understand it.

A. Will you please read it again?

Q. (Read by the Commissioner)

A. You mean now the Podlesaks?

Q. I will ask you the question again.

A. Yes, sir.

Q. Did you ever talk with Mr. VanDeventer and Mr. Clem-

ent in the room in the Great Northern Hotel in August, 1915, prior to the arrival in the room of the Podlesak brothers?

A. Yes, sir.

Q. Now, you have just narrated a moment ago as to what took place. Is that what took place before the Podlesak brothers arrived?

A. Yes, sir.

257 Mr. Wright: I wish you would read that all over to him again and see whether he wants to supplement it in any respect.

Q. Refresh your memory so far as possible and see if there is anything more that took place before the Podlesak brothers arrived.

A. I don't want to add anything.

(The question was read by the Commissioner.)

Q. Do you want to supplement that in any way?

A. No, sir.

Q. That was substantially what took place with reference to the purchase of the Podlesak patents prior to the time that the two Podlesaks arrived and took part in this meeting?

A. Well, I stated there that Mr. Clement had advised something with reference to the patents and contracts and so forth. As a matter of fact, he took the matter under advisement or consideration, and about all that was done at that conference at the Great Northern at that time was to consider a definite proposition from the Podlesak brothers, which I think was handled in the nature of an option, and the option was finally exercised.

Q. Then that option was prepared by Mr. Clement after the arrival of the Podlesaks, and it was put into definite form of an option—is that true?

A. Exactly, yes, sir.

Q. So that it was obligating on the Podlesaks and could be exercised thereafter and ripen into a purchase if the
258 Sumter Electrical Company of South Carolina desired to do so?

A. Yes, sir.

Q. Well, it was taken in your own name, however?

A. Yes, sir.

Q. And for whom did you take it?

A. I took it for—it was taken in my name and for the Sumter Electrical Company and the Splitdorf Electric; that is to say, I don't know why it was taken in my name. The option was drawn in my name because I personally had had

the several interviews with Mr. Henry Podlesak regarding the matter, and as none of us had any authority, I presume, to handle the matter with the Podlesaks it was just put in such shape that it could be acted upon after being considered by the Splitdorf and the Sumter Company of South Carolina.

Q. You put into your answer "I presume". Is this a process of reasoning in your mind, or is it your knowledge or information?

A. Well, that was the way it was; yes, sir.

Q. Then will you withdraw the words "I presume" from your answer?

A. Yes, sir.

Q. And it was a fact that you were to take the option and assign the right to the Splitdorf people and the Sumter people?

A. Yes, sir.

259 Q. If they chose to exercise it?

A. Yes, sir.

Q. And that was discussed between the counsel of the Sumter Electrical Company, Mr. Clement,—

A. Yes, sir.

Q. (Continuing)—and yourself?

A. Yes, sir.

Q. And Mr. VanDeventer, an officer of your company—I think you said he was an employee of that company?

A. Yes, sir.

Q. And familiar with its requirements?

A. Yes, sir.

Q. And so advised that that option be taken?

A. Yes, sir.

Q. And you thought it was a good thing?

A. Yes, sir.

Q. Now, how long before that had you first begun to talk with Henry Podlesak with reference to this option or purchase, if it might ripen into a purchase, how long before this meeting had you begun talking with Henry Podlesak about such a deal?

A. I would say a month or so.

Q. Now, he put into your hands his contracts with the Webster Company during the conversations that you had with him a month prior to this meeting?

A. I never saw those contracts until the meeting at the Great Northern Hotel.

Q. Who had them then?

A. Mr. Podlesak.

Q. Now, you said that prior to the arrival of the Podlesaks you talked with Mr. Clement, and upon your statement, as you have told it, he thought that they should be 260 bought, these patents or whatever rights the Podlesak brothers had, that they should be bought.

A. I think I modified that to say that there was nothing definitely decided until the conference after the Podlesak brothers came into the conference.

Q. Well, whatever there was there, why, Mr. Clement and Mr. VanDeventer and you were after, but you didn't know what it was until the Podlesaks came in with the documents—is that the idea?

A. I didn't know anything more than what I understood to be its condition; that the Podlesak brothers owned patents, and under those patents the Webster Company was licensed to manufacture certain ignition devices, and under these patents that the Podlesak brothers were also going to manufacture ignition devices.

Q. The same things that the Webster Electric was going to manufacture—had been manufacturing?

A. So far as I know; yes, sir; that they were going into the manufacture of magnetos for stationary gas engines, which would set up another competitor for my organization.

Q. That they were going to manufacture these magnetos under the Podlesak patents?

A. Yes, sir.

Q. Wasn't that astonishing news to you that they had the right of manufacture under these patents? Hadn't you prior to that time supposed that the Webster Company had the right to do it?

261 A. No, sir; I was told by Mr. Podlesak that they had a right to manufacture these devices as well as the Webster Company; there was some agreement to that effect, or that the contracts that the Webster Company had so provided, that the owners of the patents could manufacture these devices.

Q. Well, when you found that out from Henry Podlesak, then you thought it would be a good opportunity to go into that line yourself and manufacture the same goods the Webster people were manufacturing?

A. We were already in that line; we were manufacturing a different line of oscillating equipment.

Q. Yes, but you wanted to go in that particular line that the Webster people were putting on the market.

A. No, sir; we were already manufacturing what we call a plug oscillator.

Q. Very good, but you certainly wanted what Henry Podlesak had to give you or sell to you, didn't you?

A. Yes, we wanted the Podlesaks out of the field as manufacturers, and so got a contract out of them that they would stay out of the ignition business.

Q. See if I put this fairly to you:—I want to do so—You really were not after any right to manufacture anything that the Webster people were manufacturing then?

A. No, we were manufacturing our own plug oscillator.

262 Q. Yes.

A. And the Podlesaks were about to manufacture, as I understood it, the same equipment that the Webster Company were manufacturing.

Q. And so then you thought if you could get that right to manufacture it would put the Podlesaks out of business?

A. Absolutely.

Q. And it would also give you the opportunity to manufacture the same goods that the Webster people were manufacturing?

A. Yes, sir; if we wanted to we could manufacture the same thing, with the exception of a certain type of magneto known as—the tri-polar, is it?

Q. Well, you are testifying. Please state.

A. Tri-polar, as well as I remember.

Q. You didn't want to manufacture that?

A. No, sir; we didn't want to manufacture that.

Q. And then your entire negotiations with the Podlesaks were to give you the right to go into the business of manufacturing the same machines that the Websters were manufacturing, with the exception of the tri-polar?

A. No.

Q. Well, state it please.

A. Well, I thought I had made that clear, that we were manufacturing what we called a Van Deventer plug oscillator, which accomplishes the same result as the Webster oscillator.

Q. Well, which you think does accomplish the same,
263 that is your trade theory.

A. That is my idea of it; yes, sir.

Q. Yes. Very good. You were doing that?

A. We were doing that; yes, sir.

Q. And you heard from Mr. Henry Podlesak that he was going into the line of manufacturing magnetos which would come into competition with yours?

A. Yes, sir.

Q. And that they would come into competition with the Websters, too?

A. Yes, sir.

Q. And you thought it a very good plan to put him out of business if you could buy him out?

A. Yes, sir.

Q. At a reasonable price?

A. Yes, sir.

Q. And manufacture all the stuff under this line covered by the Podlesak patents that the Websters were, if you wanted to except the tri-polar?

A. Except the business that they were handling and which we were pretty busy anyway, and considering that the Webster people were well established in that line and would be paying a royalty on all the business we did not handle, that with the VanDeventer patents and Podlesak patents we would control the field and there would be only the Webster Electric Company and the Sumter and Splitdorf Companies in the field to supply that class of equipment.

Q. Then you wanted to enter the same field that the Websters were occupying so far as the Podlesak patents gave you the right, if you wanted to exercise it?

264 A. I understood that with those patents we would be in a position to manufacture either the identically same machine as the Webster Company were making, with the exception of the tri-polar magneto, and with the VanDeventer machines we would control the field.

Q. Was this discussed with those two gentlemen, the expert and the lawyer, as to just exactly what you were after?

A. Well, I don't remember. I don't think it was in detail; but I must have stated, of course, that the Podlesak brothers—I had it on good authority—that they were going into the manufacture of these devices.

Q. You say you must of course. Do you remember that you did so state it in that meeting to these gentlemen, the expert and the lawyer? I don't want you to reason out or give your reasons. I want you to answer from recollection.

A. Yes, I will be very glad to answer if you will state your question.

Q. (Read by the Commissioner)

A. I don't remember that we went into those details at all. That was a matter entirely up to Mr. VanDeventer and Mr. Clement.

Q. Now, I will go back to this book that I spoke of, which was written by Mr. VanDeventer, and which bears the legend, "The Ignition Handbook" containing forty illustrations—price 50 cents; a common sense treatise describing electrical ignition systems for internal combustion engines; a description of modern ignition equipment for high and low tension systems and methods of installing and operating the same. Did you ever see that before?

A. Yes, sir; I have seen such a book.

Q. Have you studied it?

A. I don't think that I ever read it through, but I know pretty well what is in it.

Q. Mr. VanDeventer was considered an authority on ignition devices and ignition systems, wasn't he?

A. I consider him an authority on them.

Q. Evidently your company considered him one because they had employed him as an electrical engineer?

A. No, we didn't. We had employed him—he came into the organization as telephone switchboard workman.

Q. There isn't anything about telephones or switchboards in this book, is there?

A. No, sir.

Q. Look that over.

A. No.

Q. You are familiar with it?

A. Yes.

Q. It is altogether about ignition devices?

A. Yes, sir; but you see when Mr. VanDeventer came to the Sumter Electrical Company we were building telephone devices.

Q. Don't get your mind off on telephones. I am asking you how this man loomed up as an engineer in your employ on ignition devices. Wasn't he so employed?

A. He was employed as I have stated. He just came into the organization as a telephone man to work on switch-
266 boards, which brought him into contact with the preparation of our catalogues and work in the laboratories,

and he was a salesman and finally he got into the patent field until he became a patent attorney.

Q. And he was a patent attorney, was he?

A. He is now.

Q. And a patent expert?

A. Well, I don't know you would call him a patent expert, but he is now a practising patent attorney.

Q. When he came up there to see you he knew pretty well what the Sumter Electrical Company and the Splittorf Company wanted in their business, didn't he?

A. Oh, I think he did.

Q. And you sent for him for that reason, to confer with the attorney of that company, Mr. Clement—is that true?

A. I corresponded with him and he came up here.

Q. And he is the man you selected to come up here to talk about it?

A. Well, I would rather have him than anybody I knew in the company to advise me on matters of that kind.

Q. Do you know the difference between a rotary and an oscillating magneto?

A. Yes, sir.

Q. Perfectly familiar?

A. Absolutely.

Q. You make that a department of your business as well as Mr. VanDeventer does?

A. I am afraid I do not.

Q. Well, you know the practical end of it and how it applies in the market, and the demand?

A. Yes, sir.

267 Q. You know the forms of ignition?

A. I don't know just what you mean.

Q. Well, suppose I should take you into hand and instruct you a little. You don't seem to understand very much about electrical devices yourself. I should assume that you would understand more than I, wouldn't you—

A. You asked me something about the forms of ignition. I don't know what you mean.

Q. You don't know what I mean at all when I ask you that?

A. No, sir.

Q. How much salary do you get as president of the Sumter Electrical Company of Illinois?

A. \$7500 a year.

Q. They must think you know something?

A. Well, I hope I am earning my money.

Q. If I should tell you that generally speaking there are forms of ignition or a low tension and a high tension current, would that come within your experience and would you say that is true?

A. Yes, sir.

Q. You would know that without being an expert?

A. Yes, sir.

Q. You would know that the low tension current usually is operated by a mechanical make-and-break of the ignition points, and that it is usually used for stationary and slow moving engines—isn't that true?

268 A. It is used for stationary engines; yes, sir.

Q. Well, slow moving engines, slow speed engines?

A. Yes.

Q. Anybody in your position would know that without being an expert, wouldn't they, in contact with business of your company?

A. Well, that is a very indefinite term.

Q. Well, you make that more definite if you want to.

A. Well, I didn't know what you meant by slow speed engines.

Q. Well, now, do you know that the low tension current is usually used and can be used to better advantage for engines, stationary engines of slow speed than a high tension current?

A. No, I don't think that is the case these days.

Q. Don't you know that at all?

A. No, sir.

Q. Well, the Sumter people of Sumter, South Carolina, make a low tension rotary, as you call it?

A. Yes, sir.

Q. And the Webster people make a low tension oscillator?

A. Yes, sir.

Q. And those low tension machines, whether oscillating or rotary, are used to better advantage on engines of slow speed, aren't they, than the high tension current magneto?

A. Well, the rotary magneto—

Q. Don't get off now. Answer that question.

A. Will you read the question?

Q. (Read by the Commissioner)

269 A. I may be very stupid, but I don't understand what you mean by that.

Mr. Wright: I will change the form of the question: In-

sert the word "engines of slow speed using make-and-break igniters".

(Whereupon the question as amended was read by the Commissioner as follows:

"Q. And those low tension machines, whether oscillating or rotary, are used to a better advantage on engines of slow speed using make-and-break igniters, aren't they, than the high tension current magneto"?

A. Yes, sir.

Q. Now, that particular field is covered by the Webster oscillator—Webster low tension oscillator, and it is the only field that is covered by the low tension oscillator, isn't it?

A. I don't get you there. I don't understand the question.

Mr. Wright: Strike that out then.

Q. That type of engine were the only engines using the Webster low tension oscillator at that time?

A. Yes, sir; so far as I know.

Q. And that particular field, which was thus occupied by the Webster with its low tension oscillator, the Sumter undertook to enter with a low tension rotary—is that true?

A. We were already in that field.

Q. Now, referring to the high tension current, that 270 is a so-called jump spark device.

A. Yes, sir.

Q. And that is used for automobiles and swift moving engines, the high tension current jump spark device, isn't it?

A. It is used for automobiles and engines of any speed.

Q. Usually swift running speed?

A. Not necessarily.

Q. Well, now, you were developing the field of the high tension jump spark at the time that this question of buying from the Podlesaks their rights came up, weren't you?

A. No, sir; we were not in the high tension field.

Q. You are not until about that time?

A. Well, I don't recall whether we were manufacturing any high tension magnetos at that time—let's see, that was August, 1915—oh, I would say at that time we were manufacturing both types, low tension and high tension.

Q. The high tension field which you developed at that time, rather, came into the Splitdorf field which it occupied—is that so?

A. Yes, sir.

Q. And therefore it became of advantage to the Splitdorf Company to make some terms with the Sumter Company?

A. Yes, sir.

Q. And they did so?

A. Yes, sir.

Q. And that carried along with it, if a purchase of the Sumter Company was made by the Splitdorf Company, that carried along with it the low tension rotary machine which you were using in the field occupied by the Webster Company as I have previously stated?

A. Yes, sir; and also the plug oscillators that we were manufacturing.

Q. How many of the plug oscillators were you making at the time that this matter came up for a purchase of the Podlesak rights?

A. Very few; about, I should say, during that year possibly twenty-five hundred.

Q. To how many customers were you supplying these twenty-five hundred machines?

A. One customer.

Q. And who was that one customer?

A. Fairbanks Morse & Company.

Q. And you tried to secure other customers to introduce upon their product the plug oscillator which the Sumter Company manufactured?

A. We did when we first brought it out; and then later took only the Fairbanks Morse account until we had—in fact, that is the only account until recently that we handled. That was so large, the volume there was so large, that we did not go extensively in the plug oscillator field.

Q. After you got the Podlesak patents, then you have branched out and got other customers?

A. No, that is when we stopped going to the other customers. Before we acquired the Podlesak patents we had endeavored to sell some plug oscillators to several customers, but after we acquired the Podlesak patents we did not
272 assume to do any business with any of the other companies except the Fairbanks Morse Company, whom we were handling as to all of their ignition accounts.

Q. You had not succeeded in interesting any of the other customers with your plug oscillator; you had tried to, but you ceased to endeavor to, and confined yourselves entirely to this one customer?

A. At that time we discontinued it; yes, sir; and confined ourselves—

Q. You did try to sell, but you did not succeed in selling—

A. Previous to that time that we acquired the Podlesak patents.

Q. Now, what is the capitalization of your company—what was the capitalization of the Sumter Electrical Company of South Carolina at that time?

A. \$500,000.

Q. And what was generally its output—how many machines did it put out, of all types, per annum?

A. In 1915 I presume it was about 50,000 machines.

Q. Well, you could have very easily handled more than 2500 of the type of machine you were selling to the Fairbanks Morse Company if the demand had been made upon you to do it?

A. No, we could not very well do it because that job was not being made at the Sumter factory.

Q. Where was it?

A. It was built in Chicago.

273 Q. Where?

A. In different shops around town.

Q. At whose direction?

A. The Splittorf Company and Sumter Company.

Q. The Sumter Company of South Carolina?

A. Yes, sir.

Q. Were they being made by the Sumter Electrical Company of Illinois?

A. No, sir.

Q. So then these 2500 machines did not come from Charleston at all?

A. No, sir.

Q. I should say from Sumter, South Carolina?

A. No, sir.

Q. The works down there was extensive?

A. Yes, sir.

Q. Covering some considerable acreage?

A. Yes.

Q. And it was quite possible to have increased the output if you could have obtained the orders for that particular line of goods, was it not?

A. Well, it was not convenient for them to manufacture that job there at that time.

Q. And then furthermore you did not get the orders; that is true, too, isn't it, for more than the 2500?

A. The only orders we took was that of the Fairbanks Morse Company.

Q. Well, you could not get them anywhere else—you tried to?

A. No.

Q. You solicited them?

A. No, after the time that we originally brought out the original VanDeventer machine, some three or four years
274 ago, we discontinued the matter until—I mean, and then acquired these other patents—

Q. What other patents, the Podlesak patents?

A. The Podlesak patents; yes, sir.

Q. Now answer my question. You solicited further sales to various parties of the plug oscillator prior to the time of your acquiring the Podlesak patents, didn't you?

A. Yes, sir.

Q. And you could not get the orders, could you?

A. Yes, sir; we got some orders.

Q. Whom did you get them from?

A. We got one order from the Stover Engine Works—

Q. Who were they?

A. —Engine Works of Freeport.

Q. How many were ordered from them?

A. I don't remember.

Q. Who else?

A. That is the only order I think we ever secured.

Q. Isn't it a fact that that equipment which you supplied to the Stover Company was unsuccessfully tried out, and that the Stover Company then bought their equipment from the Webster Electric Company?

A. They did not buy any more from the Sumter Company.

Q. And they did buy from the Webster Company?

A. Well, I suppose so, I don't know.

Q. Don't you know that the Webster Company had the Stover business, retained it from that day to this, and that you have tried to get it away from the Webster Company?

275 A. I don't remember that we ever tried to do any business with the Stover Company except at that time when we originally submitted those early models there.

Q. You said a moment ago that you were increasing your sales of the plug oscillator since the time when you supplied

it only to Fairbanks Morse, the 2500 machines. To whom are you selling now in addition to the Fairbanks Morse?

A. The Worthington Steam Pump Company at Cudahy.

Q. Anybody else?

A. We sold them 3500—

Q. Anybody else?

A. Haven't sold anybody else.

Q. Do you attribute the fact that you got that order of 3500 to the fact that you were manufacturing the unitary plug and bracket under the rights which you obtained from the Podlesak brothers?

A. No, sir.

Q. Which you alleged you obtained?

A. No, sir; that is the VanDeventer machine we furnished them.

Q. So that the Podlesak patents were in no way included in the device in connection with your so-called VanDeventer patent—

A. No, sir.

Mr. Wright: Read that to me.

(The question and answer were read by the Commissioner.)

Q. (Continuing)—which you sold to these people 3500 of?

A. 3500 machines.

276 Q. 3500 machines—

A. Yes, sir.

Q. That is as you understand it?

A. Yes, sir.

Q. Now at the time that this conversation took place between you and Henry, which led up to this meeting at which the option was obtained, had not the Webster Company sued the Sumter Electrical Company of South Carolina in the Federal Court in South Carolina for an infringement of the Podlesak patents?

A. Yes, sir.

Q. In that suit was there an allegation as to what that particular infringement was?

A. I don't know.

Q. Did any allegation of infringement, so far as you know, appertain to the machines which the Sumter Company were supplying to Fairbanks Morse & Company?

A. Was there an infringement?

Mr. Wright: Read the question.

Q. (Read by the Commissioner)

A. I don't know.

Q. Well, what was the infringement alleged?

A. I don't know. I don't think I ever read the bill of complaint.

Q. Whatever it was it was pending as a claim of the Webster Electric Company for an infringement against the Sumter Electrical Company of South Carolina at the time that you met Henry Podlesak and learned from him what you have told us?

A. That I knew of this suit in South Carolina, but as to the details I am not familiar.

277 Q. You knew it was pending?

A. I knew the suit was pending.

Q. The Podlesaks were plaintiffs in that case, joint plaintiffs with the Webster Company—that is the two Podlesak brothers?

A. I think they were. I am not positive.

Q. And it was about to come to trial down there in the Federal Court in South Carolina—is that true?

A. I couldn't tell you that. I was in Chicago at the time.

Q. Now, anyway there was a claim for infringement of the Podlesak patents brought by the Webster people, the Webster Company and the Podlesaks, against the Sumter of South Carolina, pending in the South Carolina court—is that true?

A. I knew there was a law suit, and I understood an alleged infringement, but—

Q. By the parties that I told you against your company, as I have stated them?

A. I understand that is true.

Q. As to what particular device was the infringement claimed?

A. I don't know.

Q. Was it customary for you to go down to the works often when you were living in Chicago, as their representative?

A. I go down about twice a year.

Q. And during that time you would see Mr. VanDeventer?

A. Yes, sir.

Q. And the various officers of the company?

A. Yes, sir.

Q. And whatever there was of interest with reference to the various patent matters, or of importance with refer-
278 ence to various patent matters, you discussed with them?

A. I never had much to do with the patents. I have handled the sales business and the organization for years and years, but when it comes to patents I don't know anything

about the patents, and those are matters that are attended to entirely by other members of the organization whose business that is.

Q. But you understand the practical end of it, and you would know whether you want to make a certain machine or not. That is the point.

A. Yes, sir.

Q. And sometimes some lawyer comes to you and tells you that there is another fellow that claims you cannot?

A. Yes, sir.

Q. I suppose you know that business end of it?

A. Yes.

Q. And you would very likely under those circumstances discuss with him why you cannot, would you not?

A. Yes, sir.

Q. And if there is any litigation pending over any of your product you know what it is?

A. Yes, sir.

Q. That is your business?

A. Yes, sir.

Q. That is your job?

A. That is right.

Q. And you went down there from Chicago to South Carolina on company business?

A. Yes, sir.

Q. And everything that was of importance for you to know—

A. Yes, sir.

Q. —you discussed with them?

A. Yes, sir.

279 Q. And you knew about this litigation?

A. Exactly so, and in connection with that matter I was always told that the Van Deventer device was in no sense covered by any of the Podlesak patents.

Q. Didn't Van Deventer put in a patent application?

A. A number of them.

Q. So that this plug oscillator was something which you advertised to the trade had been struck upon or invented by your engineers?

A. Yes, sir.

Q. And you were putting out this plug oscillator as something that your engineers had devised?

A. Exactly so; yes, sir.

Q. And afterwards Podlesak, Emil Podlesak, put in an ap-

plication for a device covering the plug oscillator in the same field which Mr. VanDeventer had applications in?

A. I understand he did; yes, sir.

Q. So then there was an application in by Emil with reference to the removable magneto from the unitary plug and bracket?

A. I don't know what that application was. I never read it in my life.

Q. Did you know that long before Mr. VanDeventer had applied in the Patent Office for the plug oscillator, or before the Sumter Electrical Company were making them, that that particular feature had been put out by the Webster Electrical Company, the unitary plug and bracket that we are talking about?

280 A. I was very familiar with the Webster Company magneto, but did not understand that any patents on that machine covered any of the devices that were being promoted by the Sumter Company known as the VanDeventer plug oscillator; in fact, I always understood it was absolutely different.

Q. That is, that your plug oscillator was entirely different from the unitary plug and bracket of the Webster Company?

A. Absolutely.

Q. That is what you claim?

A. Yes, sir; I have been advised of that consistently and insistently by our attorneys ever since we have been in that business.

Q. Wasn't that the plug oscillator—wasn't that plug oscillator a unit of construction with the bracket—

A. Yes, sir.

Q. ~~That~~ that you fellows put out?

A. Yes, sir.

Q. And there was a dispute about that with the Webster-people?

A. I don't know about that.

Q. Didn't you know that they claimed that feature?

A. After we brought this machine out—

Q. Yes.

A. (Continuing) —they sued the Sumter Company for an infringement of some sort. I knew they claimed it then.

Q. Before that weren't the Webster people suing the Hercules Electrical Company of Indianapolis?

A. So far as I know, they were, yes.

Q. With reference to that same feature?

A. Yes, sir.

281 Q. Then you did know, Mr. Manning, that this question of unitary plug and bracket was in litigation between the Webster people, yourself and the Hercules people?

A. Absolutely.

Q. And prior to the time when you acquired these rights under the Podlesak patents?

A. Yes, sir; I knew of that litigation.

Q. You knew of that litigation?

A. Yes.

Q. And it was your business to know it?

A. Sure—but I was informed that there was no infringement whatever.

Q. I don't doubt that, that your attorneys informed you that there was no infringement by your company.

A. Exactly.

Q. But you did know that this was in litigation with the Webster people?

A. Absolutely; yes, sir.

Q. You stated, Mr. Manning, that there was a litigation between the Webster people and the Hercules, in which the former claimed an infringement against the latter. Did you in that litigation co-operate or in any way assist the Hercules people to defend against this claim if infringement, as I have stated?

A. No, sir; I did not.

Q. Didn't you ever in any way come in contact with any person whatsoever representing the Hercules people, and for the purpose of and with the intent of joining with them in such a defense?

282 A. I don't recall that I did, sir.

Q. Didn't the Hercules attorney come to see you?

A. Well, I remember meeting a Mr. Ayer or somebody. I don't remember that is his name.

Q. Sly?

A. Sly, yes, Mr. Sly.

Q. Go on and tell us what took place between you and Mr. Sly.

A. I don't remember any details of the conversation at all.

Q. Was he representing or claiming to represent in this interview with you the Hercules people?

A. I knew that he was representing the Hercules people, but I don't remember—

Q. You knew it independently of his statement to you on the occasion when you met him, or did so depend upon his statement that he was representing them?

A. I think I knew it.

Q. And did you talk with him about this litigation which had been brought by the Webster people against his company?

A. I don't remember that I discussed the matter with him at all, sir.

Q. Later did you as a matter of fact proceed with your infringement upon any agreement or understanding of any kind, name, nature or description, with the Hercules people, that you and the Hercules people should continue with the infringement against the Webster people?

A. I certainly did not.

Q. I will put this in a modified or a little different 283 form: Did Mr. Sly come to you to get any information from you for the purpose of aiding him in the defense of the suit brought against his company or the company that he represented by the Webster Electric Company?

A. I don't remember the nature of his visit at all.

Q. Didn't Mr. Sly go to Sumter, South Carolina to confer with other officers of your company?

A. I think he did.

Q. And didn't you meet him down there?

A. No, sir; I never did.

Q. You knew he was down there?

A. I heard it because I remember that he has been there, but—

Q. Did you know the nature of his business down to Sumter?

A. I didn't know anything about that; no, sir.

Q. Did you know that as a result of his visit your company indulged in further infringements, as the Webster people claimed, against their patents?

A. I do not.

Q. Well, his visit—I will change that: As a result of his visit, and your answer is what?

A. I said I do not.

(Whereupon the amended question was read by the Commissioner as follows:)

“Q. As a result of his visit your company indulged in

further infringements, as the Webster people claimed, against their patents?"

A. I don't know what was done. I don't think Mr. 284 Sly's visit had anything to do with our business in any way whatever.

Q. You testified that when you were building these plug brackets for Fairbanks Morse & Company that you did not know that there was any claim for an infringement thereby made by the Webster Company against your company.

A. I knew of this lawsuit that you spoke of in South Carolina, but I had never paid much attention to the question of whether the apparatus was as alleged, as being an infringement or anything of the sort, as that was entirely up to our legal department, and it was a matter that I personally had no active interest in.

Q. Mr. Manning, you did know at the time that those brackets or that those magneto devices, as you call them, the plug oscillator—

A. Yes.

Q. —were supplied to the Fairbanks Morse Company, that there was a contention by the Webster Company that such manufacture was an infringement against their patents?

A. Well, I—

Q. Before you made them, you knew that there was a claim by the Webster Company that you were infringing?

A. I understood that the Webster Company had sued the Sumter Electrical Company of South Carolina.

Q. Before that—before you made the 2500?

A. I could not tell you, sir, whether it was before or after.

Q. Didn't you know that before you made those 285 brackets for the Fairbanks Morse people that the Webster people had in fact sued the Hercules people for infringement of the unitary construction?

A. Possibly so. We were manufacturing those things, no doubt, at the time that this suit was filed in South Carolina, and continued to manufacture them, and we have been manufacturing them ever since.

Q. Yes, but don't get away from my question. You did know that there was an infringement suit pending by the Websters against the Hercules prior to the visit of Mr. Sly to Sumter, South Carolina?

A. Oh, pending against the Hercules; yes, sir.

Q. Yes.

A. Yes, sir.

Q. Prior to the time that you supplied the Fairbanks Morse Company with this oscillating device, as you have told, you had always fought the so-called oscillator and did not believe in it; stated that you did not believe in it—I mean, in a trade way?

A. Yes, sir; before we manufactured the oscillator, and even when we were manufacturing the oscillator, as shown in that little book.

Q. What do you mean by this little book?

A. That handbook there.

Q. The ignition hand-book that I have referred to?

A. Yes, sir—I have stated frequently that we considered the rotary the most durable machine, and I consider it so to-day.

Q. But when you wanted to get the trade of the Fairbanks Morse Company, after the attorney of the Hercules Company had gone down to see you, then you went into the field of supplying to the Fairbanks Morse Company the so-called oscillator which the Webster people claim was an infringement of their patents—is that so?

A. I don't remember that the Fairbanks Morse business had anything whatever to do with the Hercules suit, or that it was a result of anything else than that we were supplying them their ignition equipment, and they asked us to build for them a plug oscillator—I mean, an oscillating magneto of the combined plug and bracket type, which we did, the unitary construction.

Q. And that was after the visit of Mr. Sly, representing the Hercules Company, to your company in South Carolina?

A. I could not tell you to save my life. I don't know anything about those dates.

Q. Now, referring back again to this Fairbanks Morse matter, you say you supplied them with 2500—

A. I said about 2500.

Q. Is it true that they had started to equip their output with a unitary plug and bracket like that which was supplied by the Webster people?

A. I don't know.

287 Q. Didn't you manufacture for them these so-called oscillators with the unified plug and bracket in order to take away the business from the Webster people with whom at that time the Fairbanks Morse Company were doing business?

A. Positively no. I certainly did not accept their business to take it away from the Webster Company.

Q. You have a line of talk about the benefits of your particular devices, I suppose?

A. Yes, sir.

Q. And it was fair for you to get a customer if your machines on their merits could get the business; you were perfectly willing to do that?

A. Yes, sir.

Q. And whereas prior to the time that this particular matter came up between you and the Fairbanks Morse Company you had been very much opposed to the oscillating type, you were willing to supply something to the Fairbanks Morse Company along the oscillating line, if that is what they wanted?

A. Yes, sir.

Q. You did not have at that particular time your oscillating device, your plug oscillator?

A. Yes, sir; we had the plug oscillator at that time.

Q. And had manufactured it prior to that time?

A. We hadn't a regular production, but they saw the unitary structure of the VanDeventer type, liked it, and the job was duly developed in their own plant.

288 Q. And when you found that they had got their ideas along the idea of a unitary plug and bracket, you were perfectly willing to supply it to them if you could?

A. Oh, no. We submitted a VanDeventer plug oscillator which they were impressed with, the idea of the magneto being separate and distinctly disassociated from the bracket, but when they saw that they asked us to send our engineer up there and make up one of those brackets as suitable for their ten-horse engine, which we did.

Q. And you knew that the Webster people were equipping that same engine that the Fairbanks Morse was putting out with the unitary plug and bracket and oscillator, and you took that business away by supplying your devices and sending your engineer to apply your devices to their engines, that is, to the Fairbanks Morse engine?

A. Well, we got the business. I don't know just why you want to put it that way.

Q. Didn't you know that the Webster Company were furnishing their device when you got that business from the Fairbanks Morse Company?

A. Yes, I understood that the Webster people had furnished a hundred of those outfits—

Q. And then you furnished your outfit?

A. —which they liked better, and bought them from us.

Q. What was your outfit that you supplied to them?

A. The VanDeventer plug oscillator.

289 Q. What was the type or line of engines put out by the Fairbanks Morse Company, to which these 2500 plug oscillators were supplied by the Sumter Electrical Company —was it the Z-line?

A. The Z-line; and I notice you keep now referring to the 2500.

Q. About 2500?

A. Of course, we have supplied them probably six or seven thousand of those outfits.

Whereupon the hearing was adjourned to 2:00 o'clock in the afternoon of this day.

May 11, 1917, 2:00 o'clock P. M.

Parties met pursuant to adjournment before said Commissioner.

Present: Mr. Wright, Mr. Simmons and Mr. Secord, representing certain parties as before.

FREDERICK C. MANNING, having resumed the witness stand, was further interrogated by Mr. Wright, and testified as follows:

Q. Now, Mr. Manning, let us go on with this Fairbanks-Morse & Company matter. They were going to put on a new line of engines, you say?

A. Yes, sir.

290 Q. The Z-line?

A. Yes, sir.

Q. When was this?

A. It was the spring of 1915, as well as I remember.

Q. And it was before you had talked with Henry Podlesak at all about acquiring any rights under his patents?

A. I think it was.

Q. Now, they wanted an ignition system for that new line, didn't they?

A. Yes, sir.

Q. And they talked to you about it, or you went to them in order to get some of your appliances adopted by the company on this line—is that true?

A. Yes, sir; we were equipping the regular Fairbanks Morse line, and I think at that time they had brought out the—I am just trying to remember whether they had brought out the small sizes of the Z-line.

Q. Anyway you had not prior to that time supplied them with any of the Sumter Company ignition apparatus, had you?

A. Oh, yes; for years.

Q. But not these 2500 machines that we were talking about this morning?

A. No, not of the plug oscillators.

Q. Not of the plug oscillators?

A. No, sir.

Q. I will change that question so that it will read this way: Prior to the bringing out of that Z-line by the Fairbanks Morse Company, your company, the Sumter Electrical Company of South Carolina, had not supplied them with 291 any of your so-called plug oscillators?

A. No, sir.

Q. Now, I have in my hand a catalogue numbered 15, issued in 1915. Is that why you called it number 15?

A. No, sir; I think the one previous was Number 14.

Q. Well, it does not mean the year catalogue, but it means that this was the literature that you call catalogue Number 15?

A. Yes, sir.

Q. I will ask you whether that was the catalogue that listed the plug oscillators which you sold to the Fairbanks Morse Company for their Z-line, and which you call the plug oscillator? Examine that, please. (Handing said document to witness.)

A. I think it shows it in here. These are not plug oscillators.

Q. Well, turn to it then.

A. Here is the plug oscillator.

Q. On what page are they?

A. 37 to 44 inclusive.

Q. And the equipment which you supplied, being the 2500 machines that we are talking about, shown on page 38, was the oscillator shown on page 38, figure 1—is that true?

A. Yes, sir; that is the Fairbanks Morse & Company plug

oscillator; or, in other words, the one we supplied for the ten-horsepower Z-engine.

Mr. Wright: I will ask the Commissioner to please mark that catalogue numbered 15 for identification.

292 (The document referred to was marked as Defendants Exhibit 4, F. H. S.)

Mr. Wright: I offer that in evidence.

(Said document was offered in evidence by counsel for defendant, marked as Defendants Exhibit 4, and is returned herewith.)

Mr. Wright: I would like to have you also identify the page 37 and page 38, figure 1 on page 38.

(The pages referred to were marked for identification with the initials of the Commissioner, F. H. S.)

Q. Now, this particular VanDeventer plug oscillator shown in figure 1, and which you say was the type of the 2500 machines supplied to the Fairbanks Morse people for a portion of their new line Z, was equipped with a magneto which was really of rotary construction?

A. Yes, sir.

Q. But having applied to it two springs, so that, being a rotary constructed magneto, it was nevertheless given by such appliance of the springs an oscillating motion—is that true?

A. No, the springs are not applied to the magneto.

Q. How are they applied?

A. (Continuing) —as it goes with the Webster-Podlesak machine.

Q. How were they applied?

293 A. They were attached to the plug itself, and not the magneto.

Q. But being so attached, it gave the oscillating name to this movement?

A. Yes, sir; just the same as shown on page 15 of the bulletin, which shows several oscillating magnetos, all of which are of the rotary type except that in these cases the spring is mounted on the magneto making that an oscillating magneto.

Mr. Wright: Identify that page 15.

(Page 15 of the book referred to was marked with the initials of the Commissioner, F. H. S., for identification.)

Q. So that at that time the Sumter Electrical Company of South Carolina did not put upon the market anything in the

way of a magneto, anything other than a magneto of rotary construction—is that true?

A. No, sir; we were building and always have been building both types, rotary and oscillating, as is shown by that catalogue.

Q. But you are sparring with me now. You call it an oscillator. Now, I am asking you whether anywhere in any of your literature you put out an oscillating type of machine, other than that which was in its construction rotary.

A. Well, Mr. Attorney, I don't mean to be sparring with you at all. I want that to be distinctly understood.

Q. Then answer the question.

294 A. Well, the only way I can answer that question is to call your attention to those oscillators on page 15, which are essentially oscillating magnetos, and they have been manufactured ever since about the time we began to manufacture rotary magnetos.

Q. You and I are not here to discuss whether or not your product is a rotary or an oscillator. Get that out of your head now, will you? I will ask you this question: Is there any machine that the Sumter Company put on the market, being a magneto machine, which is other than of rotary construction except those which you have called our attention to and called them oscillating? Now, we are not sparring on a name. I want to have you answer that question.

A. Well, the answer to that would be simply, yes, sir; that a magneto is a rotary or oscillating magneto, depending upon whether the electrical energy is generated by rotating the wire, as in that case, or whether oscillating the wire as in that case. (Witness indicating.)

Q. And from the fact that those springs there oscillated it, you call that machine an oscillator?

A. Absolutely.

Q. Well, I tell you that I want to know whether such a machine, having that motion which you call an oscillator, is not a rotary constructed machine in other respects?

A. If you take the oscillating feature of it it is a rotary magneto; if you take the gear off it is an oscillating magneto.

295 There is absolutely no difference, so far as electrical generation is concerned, except that in one case the generating, moving member is rotated, and in the other case it is oscillated.

Q. Now, I understood you perfectly before you began that explanation.

A. Well, I am trying my best to give you the difference by telling you that the machines are one and the same.

Q. Now, again I am going to put it in one sentence, and say that I am not trying to differentiate in a name. I am trying to get at the facts. And what your literature shows are magnetos of rotary construction with, in some instances, oscillating devices—is that true—applied to them?

A. Well, you could just as easily say that they are oscillating machines used in some instances as rotary; it would be just exactly the same thing. If we started out to build an oscillating magneto that is what we would build, and yet the rotor and magno-electric and field structure would be suitable for either rotary or oscillating.

Q. So that you adopt your rotary machines, being of rotary construction, to oscillating machines, as a customer may require, by attaching these springs so as to get the oscillating motion. Is that what you mean?

A. No, we would furnish him an oscillator, which would be the machine with the additional features making it an oscillator. It is a separate and distinct machine.

296 Q. By machine you mean the rotary machine?

A. The same elements are used in the construction of the two machines.

Q. What two machines?

A. The same generating elements are used in the construction of a magneto operated rotary, or a magneto operated as an oscillator.

Q. And you take your rotary machines and turn them into oscillators by putting these springs on them?

A. Well, one here—

Q. Answer that question. Do you?

A. No, we build an oscillator and—

Q. You call it an oscillator?

A. These are oscillating magnetos shown on page 15.

Q. Wait a minute. You call it an oscillator after you put these springs on it?

A. It is an oscillator then.

Q. After it has become an oscillator, by putting the springs on as you tell, can you make it back again into a rotary?

A. Oh, yes.

Q. How?

A. By adding the parts that are necessary to be used as a rotary.

Q. By taking off the springs?

A. By taking off the springs; yes, sir.

Q. Then the only difference between your rotary machine and your so-called oscillating machine is the fact that there are springs on it, and the springs give the motion which you have been talking about, which is an oscillating motion.

297 A. Well, I must be very stupid. I don't seem to get just what you are trying to have me say.

Q. I am not trying to have you say anything. I am trying to have you answer that question the best you know how.

A. I have answered it by saying that a rotary magneto and an oscillating magneto are one and the same, so far as the electrical generating parts are concerned, but the motive power or the means of oscillating the wire through the magneto field may be either rotating or oscillating.

A. I understood you before, but I asked you a question now. Please answer it.

(Whereupon the pending question was read by the Commissioner.)

Mr. Wright: Answer that question, please. It is susceptible of an answer yes or no.

A. Yes, sir; that is the case so far as the—

Q. Wait a moment.

A. So far as the machines that are shown on page 16 are concerned. Now, with the plugoscillator there was no spring, as shown on page 16, mounted on the magneto.

Q. But those springs are mounted—

A. On the plug.

Q. On the plug?

A. Yes, sir.

Q. Exactly.

A. Yes, sir.

Q. And the magneto shaft connected with it?

A. And the magneto shaft is equipped with a crank which is used or applied in connection with the pawl actuated
298 by the springs which are mounted on the bracket.

Q. It amounts to the same thing; it makes it a unitary construction?

A. Yes, but the springs are not on the magneto at all, as is the case with the Podlesak machine which the Webster Company used.

Q. Now, doesn't that construction which you have just testified to, and which you call "plugoscillator"—being one

name—doesn't that construction involve an infringement of the Podlesak patents?

A. I don't know.

Q. Do you know whether the Webster Company claim that it does?

A. I understand they do.

Q. And isn't that what they were suing you for down there in Charleston, South Carolina—the Sumter Company down in Charleston?

A. I really don't know what they were suing for. I didn't pay any attention to it. That matter was entirely up to the attorneys.

Q. I will modify that question so that you can answer it of your own knowledge: Doesn't that construction, which you have just explained, involve an infringement of the Podlesak patents?

A. Well, in my opinion, it does not; but I don't know—

Q. Doesn't that construction which you have described involve the unitary plug-bracket construction, which the 299 Podlesak patents cover, claimed by the Podlesak patents?

A. I am not competent to say what the Podlesak patents do cover; but the plugoscillator incorporates the shelf for the magneto with the plug.

Q. And it is a unitary plug and bracket?

A. Well, we call it a combined outfit because the magneto is mainly in juxtaposition to the plug, and the rotor of the magneto is separated from springs mounted on the plug of the bracket.

Q. And this construction—

A. I mean, on the plug—not of the bracket.

Q. And this construction involves a unitary plug and bracket—does it or does it not?

A. It does involve a unitary plug and bracket; yes, sir.

Q. Now, your line of talk was against the oscillating machine anyhow; that is to say, you were talking about a rotary all the time whenever you wanted to get anybody to buy a magneto, you were talking against the oscillator and talked for the rotary, didn't you?

A. Yes, sir; we considered it a better scheme than the outfit—I mean, we consider the rotary a better proposition than the one shown on page 16 of the catalogue in evidence.

Q. Being an oscillator, as you call it?

A. Which was an oscillator, but not plugoscillator. When

we developed the plugoscillator we got better results 300 from that combination than we did from the oscillating magneto as shown on page 16.

Q. But you still did not feel entirely satisfied with the operation of those devices which you have called my attention to in the catalogue as oscillating devices; you were not satisfied with them as such, were you?

A. Oh, they worked magnificently, but it was more difficult to install them. Now, when we developed the plugoscillator then, of course, it changed the application of the oscillating magneto.

Q. And the unifying of the plug and bracket also—

A. Yes, sir.

Q. —helped very much, didn't it?

A. Yes, sir; sure.

Q. Now, when the Fairbanks Morse people wanted an oscillating type you gave them the plugoscillator?

A. Gave them—we had been furnishing them the regular oscillating type as shown on page 16; but they also wanted a machine arranged with the magneto in combination with the plug.

Q. Like the Webster machine?

A. Like the Webster, and at that time I was very much interested in that VanDeventer proposition because we had no machine that was up to that time a plugoscillator; all of our oscillators were of the type as shown on page 16, and of course at that time we did not own the Webster patents, and we were a whole lot more interested in taking that particular

order than we have been since we acquired those patents, 301 as since we have owned the Podlesak patents we have made no effort to handle any of the business that was being handled by the Webster Electric Company.

Q. In other words—

A. They were paying us a royalty under those patents, and I was a whole lot more interested in the prices we were getting than the business the Webster Electric Company were taking care of.

Q. Mr. Manning, please answer the question more specifically without going into explanations except as I require them. I will ask you this question: Did VanDeventer ever claim the unitary plug and bracket?

A. I don't know what his patents claimed.

Q. As a matter of fact, this plugoscillator that you have been talking about as the VanDeventer patent, and under

which you were manufacturing these devices, was not a unitary plug and bracket, was it?

A. Yes, sir.

Q. The plugoscillator?

A. Yes, sir.

Q. And a device which the Webster people claimed was an infringement upon the Podelsak patents?

A. Possibly they did; yes, sir.

Q. So far as you know VanDeventer had no patent for it in any way, did he?

A. I don't know whether he had.

Q. Now, let us understand this thing thoroughly: When the Fairbanks Morse people wanted an oscillating type you gave them the plugoscillator?

A. Yes, sir.

302 Q. And you claimed that was a machine made under the VanDeventer patent, didn't you?

A. I don't know whether we made any claims at all as to that.

Q. Didn't it contain a unitary plug and bracket idea?

A. Yes, sir.

Q. The same as the Webster people put on?

A. No, sir; it was not the same as the Webster because it did not combine the springs with the magneto, and I understood that was a vital difference in the two machines.

Q. Then one difference was, as you understand it, and the vital difference was that the springs were applied in one instance to the magneto, and in the other instance to the spark-plug?

A. To the spark-plug; yes, sir.

Q. And that is what you considered the vital difference?

A. Well, that is certainly a difference. I don't know whether it is the principal difference. The two machines, of course, are quite different in the details of their construction.

Q. Now, the result of your supplying those 2500 machines to the Fairbanks Morse people was that the Webster sued your company down in Charleston, and alleged the manufacture of those machines as an infringement of the Podlesak patents?

A. Well, I don't remember whether it was before or after that they sued the Sumter Electrical Company down there.

303 Q. Anyway, you quit supplying those particular devices, and did not supply only the 2500?

A. We did not quit until we acquired the Podlesak patents and the Webster contracts or agreements, whereby they were paying us royalties under the Webster patents which we then owned.

Q. Well, you did not undertake to supply anybody else but the 2500; you did not supply beyond the 2500 to Fairbanks Morse, and you did not supply any more than that 2500 after this suit was brought, did you?

A. Yes, certainly, as I stated before, we have made for them some six or seven thousand of those machines.

Q. But that was after you acquired the patents from the Podlesaks?

A. I don't know how many we supplied to Fairbanks Morse before we acquired the Podlesak patents, and I have never stated here that the 2500 quantity which you have several times referred to was intended to convey the idea that we had furnished Fairbanks Morse & Company that quantity up to that time. I didn't know that it was a material question, and I just said about 2500.

Q. Now, going back, you did as a matter of fact take a contract to supply Fairbanks Morse Company with 2500 of your plugoscillators for certain types of their Z-line—is that true? You can answer that yes or no. Did you make a contract with them?

304 A. You put it in such a way that I cannot answer you yes or no.

Q. Well, cut out the 2500.

A. That is it.

Q. All right. Your company was then sued by the Webster Company for infringement—is that true?

A. I don't know whether before or after that.

Q. You continued to supply those machines, so-called plugoscillator, to Fairbanks Morse for what sizes of engines?

A. Ten and fifteen horsepower.

Q. Are those the larger sizes?

A. Yes, sir.

Q. Now, as to the rest of the line, what type of magneto were you furnishing to supply the ignition for the rest of the Z-line?

A. Rotary magnetos.

Q. Are you furnishing the rotary and magnetos now?

A. Yes, sir.

Q. And the rest of the line?

A. Yes, sir.

Q. Haven't you made a contract to equip the rest of the line except the one and a half horsepower with the plugoscillator?

A. We have recently taken an order for three and six H. P. sizes; but I don't know what that has to do with this case at all. I am very glad to give you any information that is pertinent here, but I don't want to be disclosing business that has nothing to do with the case because Mr. Brown, who is present, is a competitor of our company, but I am perfectly willing and glad to give you any information that
305 you are entitled to, but I don't want to disclose here business matters that seem to be irrelevant to the cause.

Q. Then do you not, from all the foregoing, and well within your understanding of the situation with reference to Fairbanks Morse & Company's output, know that they do consider an oscillating type or so-called oscillating type of ignition preferable over a rotary type on these other sizes?

A. Yes, sir; so do we.

Q. Now, at the present time you told me that there were certain devices which were being assembled in Chicago by some company. Who is it that is assembling those devices?

A. H. G. Saal Company.

Q. Whom are they acting for and at whose direction?

A. The Splitdorf Electrical Company.

Q. Does the Splitdorf Electrical Company pay for these assembled devices and market them?

A. The Splitdorf Electrical Company pays for them and sells them to the Sumter Electrical Company.

Q. Of Illinois?

A. Yes, sir.

Q. And the Sumter Electrical Company of Illinois takes these assembled devices and markets them?

A. Yes, sir.

Q. And what are these assembled devices—are they a type manufactured under the Podlesak patents?

A. No, sir; under the VanDeventer patents.

Q. Is it the unitary plug and bracket?

A. It is the Plugoscillator, as shown on page 41 of the
306 book No. 15 in evidence.

Q. And that is the unitary plug and bracket?

A. Yes, sir.

Q. And it is that device which you are now selling to Fairbanks Morse & Company?

A. Yes, sir.

Q. And how many of them have you sold to Fairbanks Morse & Company at the present time?

A. About 7000.

Q. Just to finish up this inquiry with reference to these assembled devices: Where does the order for making them come from—through your company or the Splitdorf Company?

A. The Splitdorf Company, which is domiciled here in this State.

Q. What do you mean by domiciled—you mean the agent of the Splitdorf Company of New Jersey?

A. No, I mean the Splitdorf Company is what ever you call it—

Q. And it has an agent here?

A. It is an Illinois corporation.

Q. The Splitdorf Company?

A. Well, to this extent: It is domiciled— Let me ask my attorney to explain that.

Mr. Secord: What he is trying to say is that the Splitdorf Electrical Company, a New Jersey corporation, is licensed to do business here as a foreign corporation.

The Witness: Yes, sir.

Mr. Wright: Q. Then the orders are issued by the 307 Splitdorf Company, a foreign corporation doing business in Illinois, by the agent of that company, the orders are issued for these goods to be assembled?

A. Yes, sir.

Q. And manufactured?

A. Yes, sir.

Q. And then when they are manufactured, instead of their being sent back to New Jersey, they are delivered to the Sumter Electrical Company of Illinois?

A. That is right, sir.

Q. And you pay to whom for them—whom does the Sumter Electrical Company pay for those goods?

A. The Sumter Electrical Company pays the Splitdorf Electrical Company.

Q. Of New Jersey?

A. Of New Jersey.

Q. And then does the Splitdorf Company of New Jersey render an invoice to you?

A. Only to those covering the goods that are manufactured; the Sumter Electrical Company of Illinois renders the invoices to the customer, that is to say, to Fairbanks Morse & Company. In other words, it is a transaction between the Splitdorf Electrical Company and the Sumter Electrical Company, first, the Splitdorf Electrical of New Jersey having these plugoscillators made in Chicago and sold to the Sumter Electrical Company of Illinois, who in turn sell them to the Fairbanks Morse Company, and bill them.

308 Q. Where is the office of the Splitdorf Electrical Company of New Jersey, licensed to do business in Chicago, Illinois, located in Chicago?

A. I am the representative of the Splitdorf Electrical Company of Illinois.

Q. Personal representative?

A. Yes, sir—I mean the Splitdorf Electrical Company of New Jersey.

Q. Is there a Splitdorf Electrical Company of Illinois?

A. No, sir.

Q. The offices of these two companies in Chicago then are the same, that is, the Splitdorf Electrical Company of New Jersey and the Sumter Electrical Company of Illinois?

A. Yes, sir.

Q. And you are the president of the Sumter Electrical Company of Illinois, and what is your official connection with the Splitdorf Electrical Company of New Jersey?

A. A representative, I suppose.

Q. That is only because you are president of the latter, which company does represent them. Is that what you mean?

A. No, I am the representative here of the Splitdorf Electrical Company.

Q. Personal representative?

A. Well, I can't tell you what I am in that respect. I have never had it explained to me, what I am.

Mr. Secord: I can explain if you want to know.

Mr. Wright: I would like to know.

309 Mr. Secord: Mr. Manning was duly appointed the agent of the Splitdorf Electrical Company of New Jersey, as required by the statute of the State requiring the appointment of an agent when a foreign corporation is authorized to do business in the State of Illinois.

Mr. Wright: Q. I wish you would state whether there is any authorization by the Splitdorf Electrical Company of New Jersey to the Sumter Electrical Company of Illinois

to represent them here in Illinois in a business way, to market the Splitdorf goods?

A. I don't know of any specially.

Q. Then you buy of the Splitdorf Company their goods, and sell them just like anybody else?

A. Yes, sir.

Q. Only that they would not sell their goods to anybody else, but only to the Sumter Electrical Company of Illinois—is that right?

A. Oh, no, they sell them to others in the same territory.

Q. But you have a working agreement between the two corporations?

A. Well, it is no agreement at all. We handle a considerable volume of the business in distributing the products of the Splitdorf plant. Some of them, however, are handled direct with the customers in this territory, which does not come through the Sumter Electrical Company at all.

Q. Well, doesn't the Splitdorf have a direct branch here?

A. There is a Splitdorf service station here; yes, sir.

310 Q. But not any other branch than yours?

A. No, sir.

Q. Doesn't the service station sell Splitdorf goods?

A. They buy them and sell them just the same as the Sumter Electrical Company.

Q. And solicit business?

A. And solicit business; yes, sir.

Q. Isn't that service station known here as the Splitdorf Electrical Company of Illinois?

A. No, sir.

Q. Just known as the Illinois station—is that true?

A. It is known—

Mr. Secord: Do you want me to explain?

Mr. Wright: Yes, I want you to explain.

Mr. Secord: I want to save time because Mr. Manning does not know the facts, I am sure.

Mr. Wright: I have no objection to it going in.

Mr. Secord: What you refer to as the—

Mr. Wright: I would like to have it go in, but Mr. Thompson might object to it as not stated under oath.

Mr. Secord: I don't want to be called as a witness.

The Witness: I think perhaps I can explain.

Mr. Secord: If you can, go ahead with it.

A. It just occurred to me, in view of your question as to the name of the Splitdorf service station here, the name of

that station is the Splitdorf Service and Sales Company, and it is an Illinois corporation.

311 Mr. Wright: I see, and there is some working agreement between the Splitdorf Service & Sales Company of Illinois and the Splitdorf Electrical Company of New Jersey?

A. I don't know.

Q. That you don't know?

A. No, sir.

Q. What is the capital stock of the Sumter Electrical Company of Illinois?

A. \$5,000.

Q. Who owns it?

A. I don't know.

Q. Whom do you pay your dividends to?

A. Don't pay any.

Q. Did you ever attend a stockholders' meeting?

A. Yes, sir.

Q. You own some of the stock yourself?

A. Yes, sir.

Q. Who else ever attended that meeting when you were there?

A. Mr. Secord and Mr. Curtis.

Q. You are president of the company?

A. Yes, sir.

Q. You preside at these meetings?

A. Yes, sir.

Q. How is the stock voted?

A. It is voted by individuals.

Q. Did those individuals that you refer to own the stock?

A. Yes, sir.

Q. Then you do know who own the stock?

A. Well, the stock is issued in their names.

Q. Now, I want to go back to the time when you first met Henry Podlesak and talked about buying the rights of the Podlesak brothers to these patents, for the Podlesak patents; and ask you what was said on that occasion.

A. I don't remember.

312 Q. How did you come to meet Henry Podlesak and take up this question of buying patents from him and his brother?

A. I don't remember. I had known Mr. Podlesak for a number of years, and when information reached me that he was going into the manufacture of these devices I asked him

if it was so and he told me yes, and subsequently—without attempting to relate the details which I don't remember at all—we began negotiations as to the purchase of the patents.

Q. Did you bring the correspondence with you that was mentioned at the morning session?

A. I went back to the office to try and locate it, but I could not. I have not seen the correspondence since the time the letters were written, and that was when I was in another office, but while I am quite sure it is some place around our office, I could not locate it in the time I had at noon. I will be very glad to.

Q. Will you look further so that it may be produced?

A. I will be very glad to look for it and produce it.

Q. You are not able to give with any certainty anything that took place between you and Henry Podlesak leading up to this option, but you remember that you did see him on several occasions prior to meeting him in the room at the hotel?

A. Yes, sir.

Q. How long before that meeting at the hotel was it
313 that you first spoke to him about buying the patents?

A. I don't remember.

Q. Was it five months?

A. I should say it was less time than that.

Q. Was anything said by Henry Podlesak that his brother had left the employment of the Webster Company?

A. I don't remember.

Q. Did you know during the time that you were talking to Henry Podlesak, with reference to this matter, that his brother Emil had left the Webster Company?

A. As well as I remember it, that was brought out at the time that Mr. Clement and Mr. VanDeventer were here.

Q. Didn't you know that they were going into business to manufacture, and wasn't that one of the reasons why you thought it would be a good plan to buy their patents?

A. Yes, sir.

Q. When did you first find that out?

A. I don't remember those details at all.

Q. It was not very long before this meeting with the Podlesaks at the room in the hotel?

A. Why, I can't say how long it was.

Q. But it was long enough before to have some correspondence about it with the home office in Charleston?

A. In Sumter.

Q. At Sumter?

A. Yes, sir.

314 Q. And the result of that correspondence, which you say you will find, was that this meeting took place?

A. Yes, sir.

Q. Aren't you able to give any conversation that you had with Harry Podlesak in reference to it?

A. I don't remember any of the details any more than that I found out that he was in—in other words, that he would, as I saw it, consider the sale of those patents and the contracts with the Webster Company, which he explained to me were very profitable as they were collecting royalties. In fact, I think he probably mentioned the amount of royalties he was collecting.

Q. Do you remember how much he said they were getting?

A. I think around—I don't remember the figures.

Q. Eight thousand dollars?

A. I don't remember.

Q. Seven or eight thousand—

A. I know it looked to me like—

Q. (Continuing)—per year?

A. I don't remember the figures, but I know it looked like a pretty good business proposition.

Q. Well, if it interested you to the extent of buying it, as you afterwards did, why, I presume that you in some way corroborated whatever statement he made to you as to the amount of the royalties?

A. I suppose I did.

315 Q. Well, now, do you remember in what way you corroborated it?

A. I can't say definitely, but I can put it this way: I think he must have shown me a statement of the royalties he received, or something of that kind, because we had pretty good evidence that he was getting a good royalty on those, under these patents.

Q. You afterwards paid and agreed to pay, extending over a period of three years, about \$70,000 for whatever rights the Podlesaks had, didn't you?

A. I think it was sixty thousand or sixty-five thousand.

Q. Was it not \$25,000 down?

A. Yes, sir.

Q. And \$10,000 for four years?

A. Yes, sir.

Q. And five thousand for keeping out of the business?

A. Oh, yes; I overlooked the five thousand. That would be—

Q. Seventy.

A. I don't remember whether the total amount was sixty-five thousand or seventy thousand, but it has proved to be—it has worked out very nicely; the royalties under these patents amount to about fifteen or twenty thousand dollars a year.

Q. So that you will get your money back before you will have to pay Mr. Podlesak?

A. Well, we haven't yet, but we hope to.

Q. But at that same rate, you will?

A. We certainly hope so.

Q. When you were negotiating the purchase of those 316 rights, to pay that amount, you did not verify the annual royalties in any definite way so that you can tell me now what you did, did you?

A. No, but we knew what they were then, and we figured that with the Webster people handling that—I mean, handling the trade with the Podlesak plugoscillator, and as I knew their business was growing, it looked to us like the royalties would soon amount to enough to make it an investment worth while and justify our buying those patents and at the price of \$65,000.

Q. Well, then—

A. And in addition to having made that investment in the patents and royalty contracts, we eliminated the Podlesaks from the ignition field, which we were particularly anxious to do.

Q. You say eliminated the Podlesaks from the ignition field— What do you mean, the manufacture of a device that they were engaged in making subsequent to the time that Emil left the employment of the Webster Company?

A. No, as I understood it, the manufacture of the Webster plugoscillator, with the exception of the detail as incorporated in their so-called tri-polar magneto; but any of the other Podlesak magnetos would operate as well on the bracket with the plug as the tri-polar machine. So far as the tri-polar machine is concerned, I understood that the Webster Company had an exclusive license under that patent.

317 Q. And also under the patent to adjust the spark, the sparking mechanism?

A. I don't know about that. I knew that so far as the other patents were concerned, I understood the owners had the right to manufacture those devices.

Q. So that you really at that time did not have in mind the tri-polar features so much as you had the unitary plug and bracket system?

A. Yes, we had in mind that by buying those patents we would control all of the field.

Q. So that you would eventually get into the field occupied by the Websters, not only as to the unitary plug and bracket but anything else that you made?

A. Yes, sir; I understood that we would have the right to manufacture any of the plugoscillator types except the magneto known as the tri-polar Podlesak machine.

Q. And you could put your own magneto in to supply them, and put it on the unitary plug and bracket?

A. Oh, yes, had we wanted to, I understood that we could manufacture the same type of machine as the Podlesak insofar as mounting the springs on the maganeto was concerned.

Q. Did your counsel advise you at this meeting that was held at the Great Northern Hotel?

A. No, sir; I don't think the counsel advised anything as to those details at all. He simply advised that he thought the patents were good patents, and that the contracts 318 were good contracts, and he thought it was a good investment.

Q. You were familiar with the terms of the contracts between the Podlesaks and the Webster Company with reference to these various Podlesak patents?

A. Well, sir, I remember having read them, or a portion of them, but I can't say I was very familiar with them.

Q. I will call your attention to the fact that there were two contracts dated February 5, 1914, between the Podlesak brothers and the Webster Electric Company; that by the first contract the Webster Company had the right, exclusive in its nature, to make, use and sell the tri-polar magneto which you have referred to?

A. Yes.

Q. And that the second contract of that date gave the right to the Webster Company to make, use and sell, not exclusive in its nature, but being a so-called shop-right as to other devices, among them this unitary plug and bracket which you have referred to. Now, generally speaking, you

were familiar with that fact, that these two contracts covered the devices in the way that I have described?

A. I understood that the first contract you referred to covered the Webster Company exclusive license on the tri-polar machine.

Q. Upon the payment of royalties to the Podlesaks?

A. Yes.

319 Q. And that those were the royalties which you were buying?

A. I supposed so.

Q. From the Podlesaks, and which you say were a good investment?

A. Yes, sir. I was told that it was a good investment, and I think it is.

Q. And you still think so?

A. I certainly do; yes, sir.

Q. In view of the fact that the royalties payable at the time, or that were being paid at the time that you bought the Podlesak rights, were much smaller than they are now?

A. Yes, sir.

Q. And it was an exceedingly good investment for the person who put that money in?

A. Yes, sir.

Q. And it has turned out to be so?

A. Yes, sir.

Q. These two contracts cover everything in the Webster product that you wanted except that—and you would have the right under these contracts to manufacture everything in the Webster field that you wanted except tri-polar theory or idea—is that true?

A. I don't consider that they covered everything that we wanted to manufacture in the Webster field, which was the plugoscillator field, because we were already in that field with this VanDeventer plugoscillator.

Q. Did it cover everything that the Webster Company made that you wanted except the tri-polar, and that you could not get unless there was a forfeiture of the 320 tracts by the Webster people?

A. I don't understand just what you are wanting me to say there.

Q. I don't want you to say anything except what is the fact.

A. That is all I am going to say. I mean I don't understand the question.

Mr. Wright: Read it.

Q. (Read by the Commissioner)

A. Well, we did not want anything that the Webster made, as I understand it; but we did want the patent that the Podlesak brothers owned, and were going into the manufacture of in that same Webster field, in competition with Webster and ourselves.

Q. Now, let us see—let us understand that. When you began talking with Henry Podlesak, with the idea of purchasing certain rights under the so-called Podlesak patents, what did you want?

A. We wanted to control the field with the Webster Electric Company.

Q. In competition with the Webster Electric Company?

A. Not necessarily in competition with the Webster Electric Company. I say, control the field with them because it was not our purpose after we acquired the Podlesak patents to break down the business of the Webster Electric Company because we wanted to participate in the royalties which they were paying under those agreements.

321 Q. As a matter of fact, you did proceed to manufacture a unitary plug and bracket under the Podlesak patents, didn't you?

A. No, sir; under the VanDeventer patent.

Q. But it was the same, it was the same device which the Podlesaks claimed was an infringement against their patents, was it not?

A. It was the VanDeventer device, but what they claimed or what it was now I cannot tell you. That is up to—

Q. When you got the right of the Podlesaks it would quiet any claim on the part of the Webster Company against you for manufacturing—that they could maintain any claim for infringement?

A. I don't know, sir.

Q. Well, you thought so?

A. I didn't think so. I didn't know anything about it.

Q. Aren't you using those patents or manufacturing under these Podlesak patents any device whatsoever?

A. No, sir.

Q. You claim that you are manufacturing under the VanDeventer patents?

A. That is what I understand; yes, sir.

Q. But what you are supplying now in increased amounts,

as you have testified, embodies the unitary plug and bracket idea?

A. Yes, sir.

Q. Do you claim that you are not in competition with the Webster business on your so-called plugoscillator?

A. I would not consider that we are. We are not—

322 Q. Haven't you solicited any companies that are under contract with the Webster people, and that the Webster people are now supplying?

A. I don't know that we have.

Q. Well, you are the sales manager of the Sumter Electrical Company?

A. I am; yes, sir.

Q. And you would know that fact if such was the fact, wouldn't you?

A. Well, as I have just stated, I don't know of any concern that is using the Webster plugoscillator that we are now soliciting to supply the VanDeventer machine; but if it appeared to my mind advisable to do that for any commercial reason, I would not hesitate to do so, but we naturally don't want to put ourselves in the position where we are competitors with ourselves because under the existing contract with the Webster Company we are collecting royalties which we regard as a desirable revenue.

Q. How do you collect royalties?

A. Well, I say "we"—the Splitdorf Company.

Q. Then you mean by that that you do it for and on behalf of the Splitdorf Company, and then remit it to them?

A. Yes, sir; it is paid to them direct by the—

Q. But do you act as the agent of the Splitdorf Company to collect these royalty payments from the Webster people?

A. No, sir; I don't have anything to do with it. It is paid by the Webster Electric Company to the Splitdorf
323 attorneys here in Chicago, Messrs. Gann & Peaks.

Q. Then the Sumter Electrical Company have no interest whatsoever in the collection of royalties from the Webster Company, and has no interest in them—is that true?

A. Yes, the Sumter Electrical Company is interested, of course.

Q. Is what?

A. The Sumter Electrical Company is interested in the royalties.

Q. In what way?

A. Well, I cannot explain that to you.

Q. Well, wait a moment. We will keep on talking with you about this.

A. Well, all right.

Q. How much does the Sumter get, if they get anything?

A. Well, I would have to consult with my attorney about that.

Q. Well, don't you know?

A. Well, I don't care to—I don't understand the nature of the question and I think—

Q. It is not necessary for you to understand it. It is your duty to answer it.

A. I will answer it if the Court here will allow me to be advised by my attorney.

Q. Do you refuse to answer it unless you are advised by your attorney?

A. Yes, sir.

Q. You conceive that you have the right to be advised as a witness on the stand, as to whether or not you shall answer questions which are put to you in a hearing of this kind?

324 A. Well, it looks to me that I should in view of the circumstances.

Q. Well, I will inform you that you have no such right; that you are a witness and bound to answer questions as they are put to you, and that Judge Geiger, the Federal Judge in Milwaukee, will decide as to whether the questions are competent or not; and that you have no right to decide, nor any right to consult attorneys, in making up your mind to that effect. I ask you whether, after I have made that statement, you still require the advice of your attorney before your answer.

A. Yes, sir; I would prefer to have advice.

Q. Do you refuse—

A. I say, I would prefer to have the advice of my attorney.

Q. Well, I ask you now whether you refuse—not whether you prefer. Is that another question which you refuse to answer? I don't ask you whether you prefer. Is that another question which you refuse to answer?

A. Well, I don't know that I have any right to refuse or not.

Q. No, you have not unless you have some ground, as that it would incriminate you in some way. Do you mean to take the ground that it would incriminate you to answer this question?

A. Not in any sense whatever.

Q. If so, you don't need to answer.

A. No.

325 Mr. Wright: Repeat the question and I will ask you to answer that.

Q. (Read by the Commissioner)

Mr. Wright: (Continuing question) —of those royalties that are collected from the Webster people for the Splitdorf people.

A. They get them all.

Q. The Sumter people get them all?

A. Yes, sir.

Q. You have stated that as a result of this meeting at the hotel, that an option was given to you personally by the Podlesaks?

A. Yes, sir.

Q. To buy these patents?

A. Yes, sir.

Q. And you have assigned that right to the Splitdorf and Sumter Electrical Company?

A. Yes, sir.

Q. When was that contract made—September 4 of that year?

A. I think it was; yes, sir.

Q. So that a formal contract was made, a contract of sale between the Podlesak brothers and the Splitdorf and Sumter Electrical Company of Sumter, South Carolina; September 8 there was a sale by the Sumter Electrical Company of Sumter, South Carolina, of their rights—or a transfer, not a sale but a transfer of their rights under that contract to the Splitdorf Company of New Jersey—is that true?

A. I don't know those details at all. I know that the Splitdorf Electrical Company of New Jersey bought the
326 business of the corporation and its assets in South Carolina, the Sumter Electrical Company.

Q. And the Sumter Electrical Company went out of business?

A. The Sumter Electrical Company went out of business, yes.

Q. And it was going out of business, in the act of going out of business in carrying out that sale at the time that this purchase was made of the Podlesak rights, was it not?

A. I could not tell you.

Q. Don't you know as a fact that they were?

A. I don't know whether they were at that time—August, 1915; I can't tell you, sir, whether it was decided at that time to sell the business of the Sumter Electrical Company to the Splitdorf Electrical Company at that time, or to continue with the separate corporations under the royalty arrangement that had been made between the Splitdorf New Jersey Company and the Sumter of South Carolina company.

Q. Now, you were an officer, as you have said, secretary and vice president of the Sumter Electrical Company of Sumter, South Carolina?

A. Yes, sir.

Q. Up to the time that it did go out of business?

A. Yes, sir.

Q. You were familiar so far as such an officer could be familiar with the various steps that were taken to put that company out of business, weren't you?

327 A. Not very, because I was then living in Chicago.

Q. Well, just enough, not very, but just enough.

A. I knew very little about those details because considerable of the stock of the Sumter Electrical Company had passed into other hands, and I had practically nothing whatever to do with it—

Q. Well, it passed into the hands of people representing the Splitdorf people, didn't it?

A. I don't know whether you would say "representing the Splitdorf Company." They were interested in the Splitdorf Company.

Q. As a matter of fact, on the 22nd day of August there was a meeting called of the stockholders of the Sumter Electrical Company of South Carolina to confirm the sale, which you have referred to, to the Splitdorf Company of New Jersey—isn't that so?

A. I don't remember.

Q. Well, you do know that there was a notice published, don't you?

A. I know that there was such a notice published, and the transaction was—

Q. Consummated?

A. Consummated, yes, sir.

Q. The only point that you don't want to be particular about is as to the date?

A. Exactly so.

Q. You do know as a matter of fact that that was prior to

the purchase of those patents from the Podlesaks, don't you?

328 A. As you now refresh my memory, I realize that it was.

Q. You do?

A. Yes, sir.

Q. When those two gentlemen and you met in that hotel, they were equally and as well informed as yourself that the moment that you took an option to buy these Podlesak patents, that the Sumter Electrical Company was in process of dissolution, and that such dissolution had been approved by its stockholders at a meeting held prior to that meeting in the hotel that you have referred to?

A. Well, what those gentlemen knew or thought about it, I really could not say.

Q. You knew it?

A. It was not a matter—

Q. You knew it?

A. It was not discussed at all. I suppose I knew it, but it did not enter into this Podlesak transaction at all.

Q. You say it was a very good investment to buy these patents of the Podlesaks, don't you?

A. Yes, sir.

Q. And you didn't have the sixty-five—seventy thousand dollars that you were going to put in; you were not going to buy these royalties for yourself, were you?

A. No, sir.

Q. And you took that option for the purpose of assigning it to somebody?

A. Yes, sir.

Q. And there wasn't any discussion at that meeting as to who that "somebody" was?

A. No, sir.

329 Q. Whether it was the Sumter Electrical Company or the Splitdorf?

A. No, sir.

Q. As a matter of fact on the 4th day of September following, 1915, you did make an assignment of that option to the Splitdorf and Sumter Electrical Company of South Carolina—a sale? That is to say, all your rights under that option passed to those two people, two concerns—is that true?

A. I know that there was such a transaction consummated, but I don't remember those dates.

Q. Was such a transaction consummated subsequent to your taking of that option? It must have been, mustn't it?

A. Absolutely, yes.

Q. It was along in September, and you don't want to pin yourself down to the 4th of September?

A. I would do that, pin myself down to the dates if I had the records.

Q. But you are perfectly willing to testify to the sequence of those events because you remember them—

A. Sure, they are all matters of record.

Q. They are matters of independent recollection. You remember the sequence of those events, don't you, and know it of your own knowledge, don't you?

A. Well, as you recite the occurrence of those transactions, I do recall that they came along in that way that you have mentioned.

Q. Very well. Then this sale to the Splitdorf and Sumter Company of your option took place, to the Splitdorf and Sumter Company of South Carolina, after it, the Sumter Electrical Company of South Carolina, had gone out of business?

A. That is what you say, and I presume you are stating that—

Q. I am not testifying. I am asking you, isn't that true?

A. I don't know.

Q. I will go back and ask this all over again. You may make me take up five more pages of record.

A. Well, I cannot establish dates, Mr. Attorney, when I don't know.

Q. I am asking you to establish the sequence of events.

A. Well, I am trying to do that and will be glad to answer the questions.

Q. You have told me that in August the Sumter Electrical Company of South Carolina went out of business—is that true?

A. You told me that, and I told you I thought that was the time. I have not—

Q. Anyway, you did tell me and you so state now that it was prior to the time of the taking of that option?

A. Well, if the facts are in accordance with what you say. I don't know that. I am quite positive of this, that at the time that the option was given to me by the Podlesak brothers, that the Sumter Electrical Company had not sold out to 331 the Splitdorf Electrical.

Q. But was in process of selling?

A. Well, I don't even know that it was.

Q. Well, it sold out, but the stockholders had not confirmed it—is that what you mean?

A. I do not even know that that is so because those are details I did not bother with.

Q. You do know that in August some time there was a meeting advertised of the stockholders to attend and approve of the sale of the Sumter to the Splitdorf?

A. I could not tell you whether it was in August until I could see the records. I don't remember.

Q. What record have you got that you could see that would help you in that respect?

A. Why, I suppose the only records I have would be the records in connection with these Sumter and Webster cases that you are talking about. I have no records of my own.

Q. Let me ask you whether, as secretary and stockholder—whether as vice president and secretary and stockholder of the Sumter Electrical Company of South Carolina, you were informed of any meeting to be held of the stockholders to confirm the going out of business of that company.

A. I am sure I must have been.

Q. Don't you know you were?

A. Well, I can't swear that I know I was, but I am satisfied that I was informed of all transactions of importance that were necessarily accomplished in the process of that business transfer there.

Q. And you were present then at a meeting of the stockholders to confirm the sale?

A. I don't think I was.

Q. But you heard of it?

A. Yes, sir.

Q. And this contract that was made between the Podlesaks and the Sumter and Splitdorf Company was made after the dissolution of the Sumter Electrical Company of Sumter, South Carolina—isn't that true?

A. I don't understand that.

Q. (Read by the Commissioner)

A. I am quite sure it could not have been so. Of course, that is a matter of record that I cannot inform you on.

Q. I don't doubt it is a matter of record. I want your independent recollection of it, and I may be able to refresh your recollection before I get through.

A. Well, I don't know.

Q. First, I will turn to a copy of the contract, which is Exhibit F, annexed to the copy of the bill of complaint filed in the Federal Court in Chicago in the case of Webster Electric Company against Podlesak brothers, Splitdorf Electric Company of New Jersey and the Sumter Electrical Company of South Carolina; and call your attention to the fact that at page 95 where said exhibit appears, the same is dated on the 4th day of September, 1915. Please examine that and verify my statement as to that date. (Hand-
333 ing paper to witness) Is that true?

A. The 4th day of September, 1915; yes, sir.

Q. Is that true?

A. Yes, sir.

Q. That was after the meeting between you and Mr. Van-Deventer and Mr. Clement—

A. Yes.

Q. —and the two Podlesak brothers in the hotel room in the Great Northern Hotel at Chicago, was it?

A. Yes, sir.

Q. Do you remember how long afterwards?

A. No, sir.

Q. Do you remember that within four days after the contract was made, dated September 41, 1915, which is Exhibit F which I have called your attention to, there was another contract made or that there was an assignment of this contract made by the Sumter Electrical Company to the Splitdorf Electrical Company—do you remember that?

A. I remember that there was a number of papers drawn up, and whatever was necessary to complete the transfer of those patents to the Splitdorf Company was done; but as to the details and dates, I have no recollection.

Q. Now, I will call your attention to a copy of an assignment, which I have just called your attention to, and which I will ask the Commissioner to identify as Defendants' Exhibit 5, and will ask to have the same incorporated in the record as an exhibit, and will now hand the same to you.

(Handing paper to witness)

334 (Whereupon the assignment shown the witness was marked as Defendants Exhibit 5 with the initials of the Commissioner for identification, and was read to the witness in words and figures as follows:)

“DEF. EX. 5 F. H. S.

Assignment.

Whereas, Sumter Electrical Company, a corporation organized under the laws of South Carolina, entered into a written agreement on or about September 4, 1915, in which Emil Podlesak, of Racine, Wisconsin, and Jenry Joseph Podlesak, of Chicago, Illinois, were parties of the first part and Splitdorf Electrical Company, a New Jersey corporation, and said Sumter Electrical Company were jointly parties of the second part;

And, Whereas, on September 8, 1915, said Sumter Electrical Company executed a written agreement to assign all its rights arising out of or flowing from said agreement entered into on or about September 4, 1915, to said Splitdorf Electrical Company;

And, Whereas, the said Sumter Electrical Company is in process of dissolution pursuant to the laws of South Carolina;

And, Whereas, it is provided in Volume 1 of the Civil Code of South Carolina, for the year 1912, at page 771, Section 2815, as follows:

Upon the dissolution in any manner of any corporation, the directors shall be trustees thereof, with full power to settle the affairs, collect the outstanding debts, sell and convey the property and divide the moneys and other property among the stockholders, after paying its debts, as far as such moneys and property shall enable them; they shall have power to meet and act under the by-laws of the corporation and under regulations to be made by a majority of said trustees, to prescribe the terms and conditions of sale of such property, and may sell all or any part for cash, or partly on credit, or take mortgages and bonds for part of the purchase price, for all or any part of said property.

And, Whereas, Charles T. Mason, Harry R. VanDeventer, and Frederick C. Manning, were members of the Board of Directors of the said corporation at the time it surrendered its charter and begun to dissolve as a corporation, and the said Charles T. Mason, Harry R. Van Deventer and Frederick C. Manning, constituted a majority of the Directors of the said corporation at that time, and thereupon became trustees of the said corporation and entered upon the charge of their duties as such trustees pursuant to the terms of the statute law of South Carolina.

Now, Therefore, in consideration of One Dollar (\$1.00)

and other valuable considerations, the receipt of which is hereby acknowledged, the said Charles T. Mason, Harry R.

VanDeventer and Frederick C. Manning, they being a 336 majority of the trustees of the said corporation, do for themselves and for the said Sumter Electrical Company, hereby assign, transfer, set over, and deliver unto the said Splitdorf Electrical Company, all of the rights of the said Sumter Electrical Company, and of themselves as such trustees, arising out of or flowing from the said agreement entered into on or about September 8th, 1915, and also all of the rights of the said Sumter Electrical Company and of themselves as trustees arising out of or flowing from a certain writing executed by Emil Podlesak and Henry Joseph Podlesak at the City of Washington in the District of Columbia on the fourth day of September, A. D. 1915, and also afterward executed or to be executed by the said Sumter Electrical Company and the said Splitdorf Electrical Company, this being the agreement referred to in the first paragraph hereof.

In Witness Whereof, the said Charles T. Mason, Harry R. Van Deventer and Frederick C. Manning, trustees, have executed this assignment at Sumter, South Carolina, this 26th day of September, A. D. 1916.

CHARLES T. MASON

Trustee.

HARRY R. VAN DEVENTER

Trustee.

FREDERICK C. MANNING,

Trustee.

State of South Carolina }
County of Sumter } ss:

We, Charles T. Mason, Harry R. Van Deventer, and Frederick C. Manning, trustees for the said Sumter Electrical 337 Company, being first duly sworn, depose and say, that we have full power to make and execute the foregoing assignment on behalf of Sumter Electrical Company and that the execution of said assignment is our free act and deed on behalf of ourselves individually and of said Sumter Electrical Company.

CHARLES T. MASON

HARRY R. VAN DEVENTER

FREDERICK C. MANNING,

Sworn to and subscribed before me September 26th, A. D. 1916, at Sumter, South Carolina.

(Seal)

R. A. BRADHAM,
Notary Public in S. C.

South Carolina, {
Sumter County. }

In consideration of the sum of Five Dollars (\$5.00) to it in hand paid at and before the signing of these presents (the receipt whereof is hereby acknowledged) paid by the Splitdorf Electrical Company, a corporation created under the laws of the State of New Jersey, unto the Sumter Electrical Company, a corporation created under the laws of the State of South Carolina; the said Sumter Electrical Company hereby agrees and binds itself to assign, transfer, set over and deliver unto the said Splitdorf Electrical Company on demand—all the rights of the said Sumter Electrical Company arising out of or flowing from a certain writing executed by Emil Podlesak and Henry Joseph Podlesak at the City of Washington in the District of Columbia on the fourth (4th) day of September, A. D. 1915, and also afterward executed or to be executed by the Sumter Electrical Company and the Splitdorf Electrical Company.

In Witness Whereof the Sumter Electrical Company has caused these presents to be signed by its President thereunto duly authorized and attested by its Asst. Secretary thereunto duly authorized on this the 8th day of September, A. D. 1915.

SUMTER ELECTRICAL COMPANY.

By (Signed) C. T. MASON,
President.

(Seal)

Attest:

(Signed) E. H. RHAME
Assistant Secretary.

State of South Carolina {
County of Sumter } ss.

I, E. H. Rhame, one of the Notaries Public for South Carolina, do hereby certify that Charles Thomas Mason, whose name as President of the Sumter Electrical Company, a corporation, is signed to the foregoing conveyance, and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation. Give under my hand and seal this 8th day of September, A. D. 1915.

(Seal) (Signed) E. H. RHAME,
Notary Public for South Carolina."

Q. Now, having read it to you, I will ask you: This assignment purports to be signed by Charles T. Mason, Harry R. VanDeventer and Frederick C. Manning on the 26th day of September, 1916. Are you the Frederick C. Manning who signed the same?

A. Yes, sir.

Q. Is the rehearsal therein, that on September 8 the said Sumter Electrical Company executed a written agreement to assign all of its rights arising out of or flowing from said agreement entered into on or about September 4, 1915, to said Splitdorf Electrical Company—is that a rehearsal of that agreement of September 26, which you have just stated you signed as trustee, true?

A. So far as I know.

Q. Now, is your memory refreshed that the 4th day of September, 1915, is the date of the agreement between the Podlesak brothers and the Splitdorf and Sumter Company of South Carolina, and that September 8 is the date of the agreement to assign by the Sumter Electrical Company of 340 South Carolina to the Splitdorf Electrical Company of New Jersey?

A. It seems to be so, according to the records.

Q. You signed this agreement that I have called your attention to as one of the trustees in the dissolution, didn't you?

A. I think so, yes.

Q. And therefore you know not only that the Company was in process of dissolution, but you know that some time prior thereto it was in process of dissolution, don't you?

A. These transactions were being consummated, but I personally was not in touch with it at all. I was in Chicago and all of this matter was handled at Sumter, South Carolina.

Q. You signed the document?

A. Yes, sir.

Q. And you read it over at the time presumably, didn't you?

A. Yes, sir.

Q. So that you were familiar with the contents of it?

A. Yes, sir.

Q. And you know that prior to that time you had had a meeting with the Podlesak brothers, in which you had taken from them an option to purchase these patents if you chose to exercise it?

A. Yes, sir.

Q. Now, the Sumter Company was going out of business at

this time, and was in process of dissolution. That is true, isn't it?

A. (No response)

Q. You nod your head. You mean yes?

341 A. Yes, the Sumter— Just read that.

Q. (Read by the Commissioner)

A. I don't know—I know it was negotiating this sale with the Splittorf Company at that time.

Q. At the time that you were having these meetings with Henry Podlesak with a view to purchasing from him and his brother the rights of the Podlesak patents?

A. Yes, sir; but at that time I was not connected with any company but the Sumter Company of South Carolina.

Q. Naturally.

A. Yes, sir; and any transactions or any conversations that I had with Mr. Podlesak were naturally in the name of the Sumter Electrical Company of South Carolina,

Q. But when it came to taking the option you took it in your own name?

A. Yes, sir.

Q. And you could not have expected that you would transfer that to a company that was going out of business, could you?

A. I didn't think much about it. The option was simply drawn that way by our attorney, and the transaction was handled as shown by the record.

Q. One of the men, who were present in that room at the time that the option was drawn, was from the home office?

A. Yes, sir.

Q. Fresh from the home office?

A. Yes, sir.

342 Q. He knew everything that was going on down there?

A. Yes, sir.

Q. If there was a dissolution going on he knew it;— he should have known it better than you, because you excuse yourself by saying you were up here.

A. I suppose, of course, he knew it; but I don't understand what that has to do with this.

Q. It is not necessary for you to understand it. I am asking you a question and you answer that. This Mr. Van-Deventer was a stockholder, wasn't he?

A. Since hearing this instrument here you have just read I am reminded of the fact that he was a stockholder, because—

Q. And a director?

A. Because he is a director now—I mean he was at that time.

Q. Yes.

A. But I had entirely overlooked that when you asked me once earlier in the hearing whether he was a stockholder or an officer.

Q. So he knew that the company was going out of business when you took the option in your own name?

A. He must have known it.

Q. Why, certainly, and the attorney who came on?

A. Sure.

Q. You all knew when you took this option that the company was going out of business?

A. Well, I don't know how the Sumter Company—I mean, how it happened to be handled that way.

343 Q. I don't ask you to tell me that.

A. Or in my name or the Splitdorf Company. Those are details that were entirely up to our attorney. I am not familiar with any of those things.

Q. I don't care whether you answer this question as an attorney or not. I am asking for the fact.

A. That is what I want to tell you.

Q. Didn't all of you know at the time you gathered together in that room with the Podlesaks, and took this option in your own name, that the Sumter Electrical Company of South Carolina was going out of business?

A. Sumter, South Carolina.

Q. Sumter, South Carolina?

A. Yes.

Q. You can answer that yes or no.

A. Yes, sir; I would—

Q. Well, you did, didn't you?

A. Yes, sir.

Q. Now, that is enough. Now, therefore, you did not intend to convey or have this right or option of yours taken up by the Sumter Company, did you?

A. Yes, sir. Now, you asked me in the question above whether I knew that. That is to say, whether I knew that the Sumter Company was going out of business. I don't recall that I did know that, because whether the transaction had actually been decided upon to the point that it was to be consummated I do not know, and as I now recall the thing, it would seem that there was not anything definite as to

344 that. If so, it is strange that our attorneys would have considered the Sumter Company at all in the transfer of the Podlesak patents if they had known of it at that time.

Q. This is argument on your part, pure argument, isn't it?

A. No, I am just trying to make clear to you what I have intended to convey there in my answers as covering statements that I knew at that time.

Q. Now, answer me this question: Were you or were you not a stockholder, director, secretary and vice president at the time indicated in that agreement, the 26th day of September, 1916, of the Sumter Electrical Company of South Carolina?

A. Yes, sir.

Q. You were?

A. Yes, sir.

Q. And trustee in dissolution?

A. Yes, sir.

Q. Did you sign the agreement—

A. Now, one minute. As to the trustee, I don't recall what that trustee was. I have forgotten it.

Q. Didn't you know when I showed you that document that you were trustee in dissolution of the affairs of the Sumter Electrical Company?

A. It seems that I was, yes.

Q. Don't you know it now?

A. But whether it was a trusteeship, appointed prior to this transaction with the Podlesaks that you are discussing here, is not clear to my mind at all. I don't know what difference that makes.

345 Q. I don't care whether you know whether it makes any difference or not. We will get along quicker in this thing if you will answer my question.

A. I don't care about anything, except that I don't want to be misunderstood in this testimony, and I only want to state the facts so far as I know them, and I don't want to guess any more than is absolutely necessary.

Q. You don't want to guess any more. Have you been guessing in your previous answers?

A. No, I have not. I have stated the facts so far as I can recall them.

Q. Then will you withdraw that statement from the record, that you do not want to guess any more?

A. Well, you asked me questions in such a way and exhibit so much stuff here that I must say that some of my re-

plies have been more or less, "I think so," Mr. Wright. There is nothing that I know—you just remarked to Mr. Brown that you were going to question me until I told you what I knew.

Mr. Wright: You overheard me say that?

A. Yes, sir.

Q. What do you want to say in reference to that?

A. Why, that there is nothing that I know that I am trying to hold back from you in any sense whatever, and if you will just question me I will be glad to tell you the facts so far as I know them, but I am anxious to get through as quickly as possible, to get back to my office.

346 Q. You will get back to your office just as soon as you answer my questions. A few moments ago you indulged in something about "guessing" and doing the best you could, and all that sort of thing. I want you to understand that your answers must be accurate and exact.

A. Well, I am doing the best I can to make them so.

Q. Now, I call your attention to that agreement signed by you as trustee, and call your attention to the fact that it provides that under the laws of South Carolina a director becomes a trustee in dissolution. Is that true or isn't it true—is it in that agreement or isn't it in that agreement?

Mr. Secord: You don't need to answer that, Mr. Manning. The agreement speaks for itself.

Mr. Wright: Please put that down on the record, that counsel representing the witness here makes that remark.

The Witness: That is exactly what I was going to say, that I can only answer what the record shows. I am not familiar with these technical legal terms or these expressions or anything of that sort, and I am not at all competent to tell you what the law of South Carolina is.

Q. I don't ask you to tell me what the law of South Carolina is. I ask you whether that agreement, to which I called your attention, provides that under the law of South Carolina you, as a director of the Sumter Electrical Company
347 of South Carolina, became a trustee in dissolution of it.

Does it or doesn't it?

A. The records will speak for themselves.

Q. A record is not in question here. It is a question whether in that document which I show you it does so provide.

A. I do not know.

Q. I will show it to you. I also wish to caution counsel that pretends to be here representing the witness, that he has

no right to address himself to the witness; that we are before a Commissioner as if we were before the Court, and that if it is necessary to protect this proceeding it will be done.

Mr. Secord: You don't need to caution me, Mr. Counsel.

Mr. Wright: If you have anything more to say I will ask to have you withdrawn from the room. Now don't say it.

Q. I wish you would read that agreement or that so-called assignment, which you say you signed, under date of September 26, 1916, and ask you whether it provides that a director shall be a trustee. (Handing paper to witness)

A. Well, I don't see any need of my reading this thing. I don't know anything about it when I get through with it.

Q. I will read it to you.

A. All right.

Q. (Reading) "And, Whereas, it is provided in Volume 1 of the Civil Code of South Carolina, for the year 1912, at page 771, Section 2815, as follows:

348 "Upon the dissolution in any manner of any corporation, the directors shall be trustees thereof, with full power to settle the affairs, collect the outstanding debts, sell and convey the property," and so forth.

A. Those are the words that you have just read to me; yes, sir.

Q. Then when you signed that agreement as trustee, you signed it by virtue of the fact that the law provided that a director of that company should be a trustee in dissolution?

A. I only know what you have read there. I don't know anything about the law or anything of the kind.

Q. Well, you did sign that agreement, did you?

A. I signed it; yes, sir.

Q. And that was after you took this assignment; it was after you took this option from the Podlesaks?

A. Yes, sir.

Q. And you took the option from the Podlesaks back in August prior to September 26, didn't you?

A. Yes, sir.

Q. Now, please answer the question which I put to you some time ago, and which preceded all this difficulty: Whether at the time that you took this option from the Podlesaks the Sumter Electrical Company of Charleston, South Carolina, was in process of dissolution.

A. Well, sir, I don't consider that I am competent to answer that question. I don't understand it well enough to
349 make a definite statement.

Q. You don't want to answer it, do you?

A. I am perfectly willing to answer it, but I don't know what you are driving at.

Q. It doesn't make any difference whether you know or not.

A. I only have to answer what I know to be a positive fact, and you are asking for my opinion here on something.

Q. I am not asking your question.

A. What is it?

Q. I will repeat the question: When you took that option from the Podlesak brothers back in August, 1915, did you or did you not know that the Sumter Electrical Company of Sumter, South Carolina, was in process of dissolution?

A. I cannot make a definite answer; but I will say this, that so far as I am concerned I do not know whether it was or was not, but from the evidence—I mean from the exhibits here shown, it would appear that I was familiar with the transaction as being in process between the Sumter and Splitdorf Companies regarding a sale of the Sumter Company's business to the Splitdorf Company of New Jersey.

Q. Now, have you got that option that the Podlesaks gave you?

A. Have I got it?

Q. Yes.

A. No, sir.

Q. Do you know where it is?

A. No, sir.

Q. You considered this a pretty good investment for you to take in behalf of whomever you were going to assign it to, didn't you?

A. Yes, sir.

350 Q. The Sumter people didn't have any money to invest, did they?

A. Oh, yes, they had some money.

Q. What?

A. The Sumter Electrical Company had some money.

Q. Well, they were going out of business, weren't they?

A. This transaction was on that you have just referred to above.

Q. Then it would be Splitdorf money, wouldn't it?

A. Yes, sir.

Q. Who was it paid for the assignment when it was made?

A. I paid for it.

Q. Personally?

A. Yes, sir.

Q. You paid for the option, you mean?

A. Well, I paid for the—that is to say, I paid for it with a check that was in my name.

Q. Why, Henry Podlesak has testified that he got a Splitdorf check, didn't he get it from the Splitdorf Company?

A. He got a Splitdorf check payable to me.

Q. And you endorsed it to him for the benefit of Henry Podlesak and his brother Emil?

A. Yes, sir.

Q. So that it appeared on the check where the money came from, namely, the Splitdorf Company of New Jersey?

A. It was a Splitdorf Electrical Company check of New Jersey for \$25,000 payable to F. C. Manning.

Q. And F. C. Manning endorsed it payable to—

A. To Emil and H. J. Podlesak.

351 Q. As to the money that has been paid since that \$25,000 was paid, was it paid in just exactly the same way?

A. I don't remember how it was paid.

Q. You only remember the \$25,000?

A. Yes, sir; I remember it was in my name. I had the check for a couple of days.

Q. It was a very good investment for the Splitdorf Company to send up their money and invest in this royalty contract, as it eventuated?

A. I think so.

Q. What?

A. I would consider it a good investment.

Q. The Splitdorf Company are investing money, are they?

A. I don't know.

Q. Well, they did in that event according to your idea?

A. Yes, sir.

Q. They invested it because it was a good place to put money?

A. I don't know why they did it. They gave me a check for the \$25,000.

Q. A few moments ago you told me that it was an exceedingly opportune investment by which a considerable amount of money might be realized?

A. I consider it so. I am sure they did.

Q. They were in the manufacturing business, weren't they?

A. Yes, sir.

Q. They were not investing in royalty payments as a banker or a money-loaner, were they?

A. They were manufacturing an ignition equipment.

352 Q. What they wanted then was to invest in something which was going to help the ignition equipment business—isn't that so?

A. Yes, sir.

Q. And that is what you understand they were buying?

A. Yes, sir.

Q. And incidentally they made a very good investment by coming into something which would return in royalties more than they paid for it?

A. Yes, sir.

Q. And they got the ignition business thrown in like the tail with the hide—is that it?

A. I don't understand what you mean.

Q. Well, the tail is the small end of the beast and the hide is the big end—eh?

A. Well, I think they got a good deal of the beast in with it.

Q. Didn't they know which was the tail end and which was the hide?

A. I don't know just how you mean by referring to it in that way, but they acquired an interest in these Podlesak patents.

Q. They got them as the hide, did they—the most important thing to them was the interest in the Podlesak patents?

A. No, I think the most important thing to them was the—

Q. The investment feature?

A. The royalties to accrue on the investment.

Q. Then the very small end of the transaction was the fact that along with the very nice investment, which
353 turned out so profitable to them as an investment in dollars and cents, putting in \$75,000 and getting back at the rate of \$18,000 a year, they got the small end of it besides the little something that the Podlesaks were interested in—is that your idea?

A. I don't know. I don't understand it the way you put it. I can't answer that kind of questions.

Q. Well, I am just going to ask you another question about that. It is very interesting. Who got these royalties?

A. I have just stated that the Sumter Electrical got them.

Q. Then the royalties were not very important to the Splitdorf people, were they?

A. Yes, sir.

Q. What?

A. Yes, sir.

Q. Well, they gave them to you—they give them to you people?

A. Yes.

Q. And they did get, as a matter of fact, some rights, whatever they were, that the Podlesaks had in these two contracts?

A. And patents.

Q. What other patents were they that they got an interest in besides these that were mentioned in these two contracts?

A. All of the patents that were acquired from the Podlesaks.

Q. Was there any besides?

A. I don't know.

Q. Is there one with reference to a removable magneto that has been since passed over to the Sumter or the Spltdorf by Emil Podlesak?

A. I don't know of that.

354 Q. If there is such a patent pending or granted with reference to a removable magneto, and not covered by these two contracts, you don't know anything about it?

A. No, sir; I don't know anything specific. I know there is something, some transaction in connection with patents in process that I have heard something about, but I don't know the details of it at all.

Q. With reference to this removable magneto—

A. I just said I do not know what those patents cover, Mr. Wright.

Q. But there are some applications, or applications for patents since taken out, or in the patent office, by either one of the Podlesak brothers or both of them, that are now subject to negotiation or that are in process of negotiation between the Spltdorf Company and the Podlesaks?

A. If there are, I don't know it.

Q. Did the Sumter Electrical Company of South Carolina ever put a dollar into this purchase of these rights from the Podlesaks?

A. I couldn't tell you. I don't know.

Q. You have no knowledge that they did?

A. No, sir.

Q. Although you appear to have been vice president, secretary, director and trustee, you have no knowledge of the

Sumter Electrical Company of South Carolina—you have no knowledge that they put a dollar into it?

A. No, sir.

Q. And if they did it is something that you are entirely unfamiliar with?

A. Yes, sir.

Q. You do know as a fact that the Splitdorf Company paid the consideration as you have testified?

A. Yes, sir.

Q. Did the Sumter Electrical Company of Illinois ever put a dollar into this purchase price of these patent rights from the Podlesaks?

A. I don't know how to answer that.

Q. Well, you are president of the company?

A. Yes, sir.

Q. Did the Sumter Electrical Company of Illinois put in a dollars for the purchase of these Podlesak contracts?

A. I don't think it was in existence at that time, sir.

Q. Has it since?

A. Yes, sir.

Q. How much?

A. I don't know.

Q. You are president of the company?

A. Yes, sir.

Q. You would know—you should know and be familiar with that fact, shouldn't you?

A. Well, it is easy enough to find out.

Q. Will you please find out and report that with the correspondence which I have called for?

A. Yes, sir.

Q. Now, directing your attention to the Podlesak contracts again: There was a question of good-will. What good-will did you buy of the Podlesak brothers under that option to you?

A. I don't know.

Q. Whatever good-will they had was not good-will that they had given to the Webster people to use their name, was it?

A. I don't know.

Q. Don't you know what the good-will that the Podlesaks were selling you was?

A. Well, where is it mentioned, good-will? I don't know anything about any good-will. I know that all patents and agreements and contracts that they had with the Webster

Company as to the good-will, I don't know whether that was a point that we considered. I am sure, however, we got all we were entitled to under those transfers.

Q. At the time that you took this option were you familiar with the situation existing between the Webster Electric Company and the Podlesaks, with reference to the payment of back royalties?

A. I don't know anything about that.

Q. Or claimed for back royalties?

A. No, sir; I don't know anything about that. All I know is that I was hearing something as to some differences they had, but as to the details it did not interest me and I don't know anything—

Q. You knew there were some differences between the Podlesaks and the Webster Electric Company as to the payment of royalties accruing prior to the 1st day of July, 1915?

A. Well, I have just used that word "differences," but I don't know what it was.

Q. But whatever it was, they were included in the purchase, and you were entitled to the benefit of those differences, were you?

A. I don't remember that. I presume that at the time the option was drawn up they agreed that when the Webster Company paid them the royalties for the ensuing or that quarter, that the Podlesak brothers would be—I mean, a certain amount of that was to go to the Podiesak brothers and the balance to the Splitdorf Company.

Q. And that was the portion of the royalties which accrued between the 1st day of July, 1915, and the 1st day of October, 1915, and the sale to you was in that quarter?

A. Yes, sir.

Q. So that what accrued prior to that time they would retain?

A. I don't know anything about that, whether that was discussed. I don't see how the Splitdorf Company would have any interest in royalties accruing before the time the patents were sold to the Splitdorf people.

Q. Did you know that there was a default declared or a claim of default made by the Podlesak brothers against the Webster people because they had not paid all the royalties which had accrued prior to the 1st day of July, 1915?

A. Mr. Wright, I am not familiar with any of those matters.

Q. That was not discussed between Henry Podlesak and

Emil Podlesak and the attorney of the company and yourself?

A. It may have been, but I don't remember anything about it.

358 Q. You would not say that it was not?

A. I don't remember that it was or that it was not.

Q. You would not say there was not any discussion there as to the question of a default which had accrued prior to the 1st day of July, 1915?

A. You mean now a matter between the Podlesaks and the Webster Electric Company?

Q. Yes.

A. I don't think it was discussed at all. I don't see why—

Q. They said there was some difference—you understood there was some difference about the adjustment of royalties prior to the 1st day of July, 1915?

A. I am just trying to remember whether that matter was referred to, but I cannot state definitely whether it was.

Q. If there was a default, you bought the right to benefit by that default, didn't you?

A. I don't know whether we did or not, sir.

Q. You wanted the tri-polar construction if you could get it, didn't you?

A. No, sir; we had no need for it whatever; wouldn't have used it.

Q. If there was any default made by the Webster Electric Company prior to the 1st day of July, 1915, you would insist upon the right whatever it was, wouldn't you?

A. Positively no, because I would not use it if I had it.

Q. Why wouldn't you use it?

A. Because I consider the VanDeventer machine a
359 better proposition. The Webster tri-polar machine is an inductor machine, and I don't like that for the character of ignition that the equipment is used for. I would rather have a rotary or what is known as a Siemens type or shuttle-wound armature machine.

Q. The Webster type gets the bulk of the business in that line, doesn't it?

A. It gets the bulk of the business, yes, sir—I don't know, however, Mr. Wright, that the fact of the Webster machine having a tri-polar magneto has anything to do with that.

Q. If you forfeited the contracts under any claim made by the Podlesaks prior to July 1, 1915, or by you at any subsequent time—and by "you" I mean the Splitdorf Company,

you would get all the Webster business, wouldn't you—you would have the exclusive right then to make the tri-polar magneto?

A. No, sir; because we would not use it.

Q. Wouldn't you use it and get all the profits in that field, instead of getting a mere royalty from the manufacture by the Webster in that field?

A. No, if I wasn't manufacturing all the oscillating type of magnetos of that unitary structure that are made, I would make them like the VanDeventer machine.

Q. Then you would really like to limit the competition and put the Webster out of business?

A. No, I don't want to put the Webster out of business—not now. Before we acquired the Podlesak patents I had no desire to see the Webster people stay in business, as I have not for any other competitor. They were competitors of ours; but we eliminated that relationship by acquiring the Podlesak patents, and it placed us in a position where it was "the Webster Company and ourselves," as it were.

Q. And the Webster had to account to you?

A. Yes, the Webster Company pay the Splitdorf Company the royalties. It did not mean a bit more expense, except as resulting from these law suits which the Webster Company have instigated—

Q. Well—

A. (Continuing) —than the royalties which they were originally paying the Podlesak brothers; but we certainly, by eliminating the Podlesak brothers, have broadened the field for the Webster Company.

Q. Well, in what way are you broadening the field for the Webster Company if you have got a better device than they have?

A. Why, we, by acquiring the Podlesak patents, we eliminate the Podlesaks from the field and reduce the Webster competition to ourselves, and we naturally, as receiving royalty from the Webster Company, are not working very hard to break down the business of the Webster Electric Company.

Q. But you can put the Webster Company out of business any time you want to if there is a forfeiture, isn't that true?

A. Well, if there is any such possibility as that I never knew it, but I certainly don't want to, as long as it is run as well as Mr. Brown is doing—

Q. What did you pay the Podlesaks for quitting business?

A. \$5,000.

Q. What did you pay the \$65,000 to him for?

A. The patents and contracts.

Q. Then the contracts were not worth anything according to that?

A. Why, isn't that what we are collecting the royalty under?

Q. But I say, you only bought them to get the royalty? —

A. We bought them to get the patents away from the Podlesak brothers.

Q. Well, you paid five thousand for them?

A. No, we didn't.

Q. What did you pay?

A. We paid them five thousand for agreeing to stay out of the ignition field.

Q. What did you pay the sixty-five thousand for?

A. For the patents and the contracts.

Q. What part of it did you pay for the contracts—for the royalties?

A. I don't think we ever tried to draw a dividing line there.

Q. But you made a good investment out of it?

A. I think we did.

Q. You paid the greater part of the consideration in order to make a good investment; you didn't pay anything for these patents?

A. We paid \$65,000 for the patents and the contracts.

362 Q. Well, you don't regard the patents as of any comparative value?

A. Well, I don't know anything about what the patents were worth or anything of the sort.

Q. Well, you would not use them?

A. No.

Q. And you bought them to get the Podlesaks out of business then?

A. No, we bought it—I can't tell you as to what the patents are worth, or the contracts, or anything of that sort, Mr. Attorney. I can only tell you that when Mr. Podlesak and I got together we decided on a price that would give us the ownership of the Podlesak patents, and give us the contracts under which the Webster Company were operating and paying royalties, and would give us with the Webster Company a monopoly of the field.

Q. If Henry Podlesak testified that he gave notice of forfeiture to the Webster Electric Company, at the request of the Splitdorf Electrical Company and the Sumter Electrical Company, is it true—did he state the truth when he made that statement?

A. Mr. Wright, I don't know anything about that matter. That is something that our attorneys handled, and I don't know anything about it.

Q. Then you did not want those contracts forfeited at the time that Henry Podlesak was actually serving notice upon the Webster Company, that, as the attorney for the Splitdorf and Sumter people and for his brother and himself, that the same should be forfeited?

A. No, that is a matter that I don't know anything about and don't care anything about. I am perfectly satisfied with the situation as it exists to-day.

Q. Then you are giving your personal opinion and not what your company wanted. You don't know what the Splitdorf or the Sumter Electrical Company of South Carolina wanted?

A. All I can tell you is what I wanted—or I am perfectly satisfied with the arrangement as it is now; it suits me fine.

Q. Has the Splitdorf Electrical Company of New Jersey ever parted with the right to those Podlesak patents under the assignment made—under the agreement made by the Podlesaks with the Splitdorf and Sumter Electrical Company and under the assignment of the right of the Sumter to the Splitdorf Company?

A. No, sir.

Q. And they at the present time—that is, the Splitdorf Electrical Company—are the sole owners of those rights and have been up to the present?

A. So far as I know; yes, sir.

Q. So far as you know. And the payment of royalties, however, is made to the Sumter Electrical Company of Illinois?

A. Yes, sir.

Q. When did the Sumter Electrical Company of Illinois become entitled to the payment of those royalties?

A. I don't know.

Q. Ever since the date of the assignment to the Splitdorf Company on September 8, 1915?

A. It was not in existence then.

Q. When it first came into existence did it then have the right to collect those royalties?

A. I don't know. The royalties were paid to the Splittorf Electrical Company of Illinois and remitted to them.

Q. And then by them remitted to the Sumter?

A. Well, I don't know whether you would call it the royalties or not. I don't understand what you are getting at; but the amount of money was later credited to the account of the Sumter Electrical Company.

Q. The Sumter of Illinois?

A. Yes, sir.

Q. Has the Sumter Electrical Company any investment in these patents?

A. No, sir.

Q. Never put a dollar in?

A. Well, I don't know how to answer that. I don't know whether we have or we have not.

Q. Well, you are familiar with the affairs of the Sumter Electrical Company?

A. Yes, sir.

Q. What are the facts with reference to it? State it fully and frankly, and then the Court can judge.

A. Well, that is what I say—I don't know whether the Sumter Electrical Company of Illinois has as an investment, 365 but the Sumter Electrical Company of Illinois have paid the Podlesaks, as I stated a while ago, some of the payments due them, and the Sumter Electrical Company of Illinois have paid some of the attorney's fees, of which there are a great many.

Q. Have you ever paid any attorney's fees to Mr. Thompson, of the firm of Thompson, Myers & Kearney of Racine, who are attorneys in this case for the relator, Mr. Emil Podlesak?

A. He is not our attorney, is he?

Q. No, I didn't state that he was.

A. Well, we have never paid Mr. Thompson or that firm anything. The only attorneys we have ever paid are Gann & Peaks and Mr. Bulkley.

Q. Is the Sumter Electrical Company of Illinois in litigation with the Webster Electric Company?

A. What?

Q. In litigation in any action pending with the Webster Electric Company?

A. The Sumter Electrical Company?

Q. Yes, of Illinois?

A. I don't think they are.

Q. Then why are you paying these attorney's fees?

A. Well, I don't know that I can explain that. It just happens that way.

Q. Somebody has told you to do it?

A. Well, yes, we have been told to.

Q. Who told you?

A. Well, this account—this matter was turned over to 366 the Sumter Electrical Company by the Splitdorf Company at Newark, that is, the New Jersey corporation; but I don't know that the matter is in just as well defined shape as it ought to be.

Q. But you are paying whatever expenses are certified to you to pay, whatever it is, whether it is attorney's fees or anything else?

A. Yes, sir.

Q. And if it is necessary for you to become posted as to the customers of the Webster Electric Company in any way, and any fee is necessary to be paid to accomplish that purpose, it is for your company to pay it?

A. No, sir; under no circumstances whatever am I, in the first place, interested in who are the customers of the Webster Company; and under no circumstances would the Splitdorf Electrical Company pay anybody to acquire that information for them because they don't need it. I have no interest whatever in the customers of the Webster Electric Company, excepting that they are paying them for magnetos and we are getting the royalties.

Q. As a matter of fact you are not getting royalties paid to the Sumter Electrical Company by the Webster Company, but you are getting them as a credit on your account to pay whatever you disburse in this litigation over the Podlesak patents?

A. No, sir; that don't have anything to do with what we disburse.

Q. But you said a moment ago that it did, didn't you?

367 A. No, I didn't say it had anything to do with what we disbursed. We might pay out twice the amount that the Splitdorf would collect or turn over to us as having been received from the Webster Electric Company for royalties.

Q. Do you get all the royalties that the Webster Company pay to the Splitdorf Company; and the Splitdorf, does it turn over to you all of such royalties without reference to what

the Sumter Electrical Company of Illinois pay in the form of expenses?

A. They do not ask us any questions about that. It is all shown on our record, and I suppose we have gotten all of the royalties that have been paid.

Q. Well, you know whether you have or not, don't you?

A. No, I don't know it, but I think we have.

Q. Well, you would know if you had not, wouldn't you?

A. No, I would not know that.

Q. Well, they turn over to you a certain amount of money—

A. Yes, sir.

Q. —without respect to what money you pay—

A. Yes, sir.

Q. —in expenses over this litigation?

A. Exactly so.

Q. And that money that they give to you to put on the other side of the account is supposed to be, so far as you know, all the royalties that the Webster Company are paying to the Spltdorf Company on account of these Podlesak agreements?

A. That is another way to ask me the same question, 368 and I can only answer it as I did before.

Q. Well, answer it now.

A. I said I did not know whether we did get them all or not, but I think we do.

Q. Then whatever the expenses are of the litigation of any name or nature, you will be the paymaster?

A. I don't know that even.

Q. Well, in the past you have paid them?

A. In the past I have paid them, yes.

Q. And there hasn't anything gotten by; if there was any expense of that kind it would come to you; it would not go to the Spltdorf, would it?

A. I don't know how those accounts have been rendered.

Q. You don't know what?

A. I don't know how those accounts have been rendered.

Q. You would not act blindly in the matter; you would be informed with reference to that account, wouldn't you?

A. Yes.

Q. What do you call the account—Podlesak litigation account?

A. Webster-Podlesak litigation.

Q. And on one side of it, whatever the disbursements are—

A. No, I don't think it is handled that way, but I don't know. I will be very glad to show you if you will come to my office.

Q. I wish you would find out and report again to-morrow morning with reference to that.

A. All right, sir.

369 Q. Now, this method of disbursement by you, with reference to this litigation,—that is, by your company with reference to this litigation,—and the receipt of the royalties from the Splitdorf people to compensate your company for these disbursements are not made by virtue of any agreement, written or otherwise?

A. No.

Q. It is just one of those things that happen?

A. It just happened, yes.

Q. And you expect to take care of the litigation?

A. I don't know.

Q. But you have?

A. I have; yes, sir.

Q. And you expect to get royalties against those disbursements?

A. We hope to.

Q. Well, you have?

A. We have most of them—so far as I know we have.

Whereupon the hearing was adjourned to May 14, 1917, at 10:00 o'clock in the morning.

370 May 24, 1917, 10:00 o'clock A. M.

Parties met pursuant to adjournment before said Commissioner.

Present:

Mr. Wright, Mr. Simmons and Mr. Secord representing certain parties as before.

FREDERICK C. MANNING, having resumed the witness stand, was further interrogated by Mr. Wright, and testified as follows:

Q. Directing your attention to the correspondence which I requested you to produce at this time—did you find it?

A. Yes, sir.

Q. Have you it with you?

A. Yes, sir.

Q. Will you produce it?

A. Yes, sir.

(Whereupon the witness handed paper to Mr. Wright.)

Mr. Wright: In response to this request, witness produces carbon copy of a letter dated August 10, 1915, which begins "H. R. V. Patent Matters" but without signature; the letters "FCM" being printed at the bottom.

Q. Is that the only letter that you could find, Mr. Manning, with reference to this matter?

A. Yes, sir.

Q. Is "H. R. V." Mr. VanDeventer?

A. Yes, sir.

Q. And did you sign the original, of which this a carbon copy, and send it off to him?

371 A. I don't remember, but I am quite sure I did.

Q. The fact of "FCM" there below indicates to you that you must have signed it?

A. Yes, sir.

Q. Did you get this from the regular file you used, in the proper place as correspondence, which actually passed between you and Mr. VanDeventer?

A. Yes, sir.

Q. So that the records of your office disclose the fact that in due course of business the original, of which this is a carbon copy, was despatched to VanDeventer and signed by you at the date indicated?

A. Yes, sir.

Q. Did you get a reply from Mr. VanDeventer?

A. I could not find any. I recall that when I wrote that letter, since reading it, that I went away, as it states, and when I got back off of that western trip I am under the impression that there was a telegram from VanDeventer, but I was unable to locate the telegram, saying that he and Mr. Clement would be out here, and I think they came on the 19th of August.

Q. And that this meeting that you have referred to in your testimony took place then on the 19th of August?

A. Yes, or whenever they arrived.

Q. Was the option on that day when they arrived—

A. The day following, as well as I remember; yes, sir.

Q. Have you a copy of that option?

A. No, sir.

Q. What became of it?

A. I could not tell you.

Q. Did you turn it over to counsel representing the company?

372 A. Yes, the attorneys, Mr. VanDeventer and Mr. Clement, had it so far as I know.

Q. You were to also look at your books and supply some information. Did you do it?

A. Yes, sir. You asked me the amount that we paid to the Podlesaks, and I found it to be \$10,000.

Q. And the prior \$25,000 had been paid by the Splitdorf people?

A. The Splitdorf Electrical Company.

Q. The Splitdorf Electrical Company?

A. Yes, sir.

Q. In the way you have described? But this ten thousand was paid by the check of the Sumter Electrical Company of Illinois?

A. Yes, sir.

Q. By its check?

A. So far as I remember. I didn't verify that but—

Q. But it appears on the ledger account, does it?

A. Yes, sir.

Q. How is that account headed?

A. It is headed "Patents" and that item is just charged under Patents.

Q. Any other items charged besides that ten thousand item?

A. Yes, items covering litigation fees and things of that kind; just one account.

Q. And does it say to whom those litigation fees have been paid?

A. I presume so. I didn't notice that detail, but I know the records will show that clearly.

Q. So that you can show every dollar that has been
373 spent by the Sumter Electrical Company of Illinois from this account, and running it down to the journal from the ledger?

A. Oh, there would be no trouble to establish to whom any moneys were paid.

Q. And on the other side of the account are credited against these disbursements the royalties which the Webster Electric Company has paid under these Podlesak contracts?

A. The amount of money as received from the Splitdorf Electrical Company to be credited to that account.

Q. Which represents the total amount of royalties received on account of the Podlesak patents?

A. So far as I know, it does. I did not verify that.

Mr. Wright: I will ask to have this carbon copy of the letter referred to identified as a defendant's exhibit.

(The document referred to was marked for identification as Defendants Exhibit 6 with the initials of the Commissioner.)

Mr. Wright: I now offer the same in evidence and read the same into the record as follows:

"H. R. V.

August 10, 1915.

Patent Matters.

Dear Van:—Although I am terribly rushed today trying to get things in shape to leave for Nebraska tonight, H. J. Podlesak dropped in and gave me a chance to find out what he knew about Webster's latest move. H. J. brought in his 374 new oscillator to show me. He had just come in from

Champaign Illinois where they have been holding a tractor meet, and said one of the Webster agents had told him he understood there was a deal on between Webster and Sumter and that Webster was going to take over Sumter, or vice versa. Someone had also told him that Williams, Brown, Mr. Webster and a Mr. Becker, the latter a Chicago banker, were all in New York where an important conference is being held, or was held last week with the Sumter interests.

"I asked H. J. what he knew of the patent Webster Company is claiming as anti-dating the Dixie. He says it is the old Varley idea which has been modified to some extent by the original Webster Company's engineer, one Milton, the exploits of whom nearly wrecked the old Webster Mfg. Co. This fellow, Milton, he says is the chap who got him (H. J. and his brothe Emil) into the Webster organization because of Milton's infringement of the Podlesak patents, the matter having been finally adjusted by Podlesak giving the Webster people a license, their royalties to be not less than \$5,000 per year. This year it will run to \$12,000 he says.

"It appears that Milton had some agreement with the original company (Webster) whereby if they sold out he was to be paid \$50,000. This was compromised to half the amount and that the present Webster Co. had to pay off this \$25,000.

H. J. claims that the old company's experience with Milton's high tension machine cost them many thousand dollars and that if they have any idea of reviving this machine it will soon break the present company.

"He says Lynn Williams evidently thinks some of the claims of this patent may read on the Dixie, but that he does not think Williams has a very broad idea of the previous history of machines of this Varley type. Podlesak is evidently very well informed as to the similarly constructed machines resembling the Dixie, and I believe it may be a good idea for you or Clement to have a talk with him, as he can tell you a great deal of the history of this Milton-Webster patent, his suggestions to Milton, etc., etc. He said he had just scrapped one of these old machines a few days ago.

"It appears that Milton went from the old Webster Co., to the Remy people, where he did more experimenting with machines of the Varley principle. Soon after he married a woman of some means and for the past year or so has been living in Detroit where he has been developing some other devices, and recently has written Emil Podlesak offering him a proposition to come with him and commercialize his new scheme. I neglected to ask Podlesak what the new scheme is.

"I think I have scared H. J. pretty well out of the idea of manufacturing his own new machine, but from what I could get out of him today, it appears he has the right under his agreement with the Webster Co. to manufacture any of 376 the Podlesak magneto outfits himself, or to sell his patent with this right to manufacture and sell without interference from the Webster Electrical Co. Brown would probably dispute this, but he says his contracts with the Webster Co. will make clear his rights as stated in the premises. Now, if Brown (the Webster people) gets too obstreperous, and if the bad feelings between Brown and Podlesak continues to brew as at present, I think H. J. and Emil will be in the frame of mind to consider such negotiations with us as would let us right into the Webster business, and with their line and plug-oscillator, we sure would be in shape to command the field. I don't think Podlesak would expect anything like royalty he is collecting from the Webster Co., and besides this Brown is getting 5% on the gross sales, besides his salary.

"It is pretty tough on me, with these matters coming up and without my knowing anything of what has been going on down in New York, beyond what you wrote me the other day, so I hope you will advise me fully in the premises. I certainly wish you and Mr. Clement would get out here together as I believe we could have a very interesting "round" with the Podlesaks.

"Hope you can get some sense out of the above, all of which I have run off in a hurry and on an empty stomach too, as haven't had time to get out to lunch today.

Hastily,

FCM.KW.#40."

377 Q. You want that back, do you?

A. I would like to have it back for the files; yes, sir.

Mr. Wright: It is returned to the witness with the request that the same be carefully preserved in the records of the company at that place from which it was taken.

Q. Now, directing your attention to this question at the hotel, the option was prepared at that meeting by the attorney for the company, the option to you?

A. Yes, sir; by Mr. VanDeventer and Mr. Clement.

Q. And presented to the Podlesaks and signed by them then and there?

A. Yes, sir.

Q. How long a time were you and Mr. VanDeventer and Mr. Clement in consultation before the Podlesaks came in?

A. I don't remember.

Q. Was it over an hour or was it ten minutes—was it a short or a long time?

A. As well as I remember, Mr. Henry Podlesak was at that conference within a very short time after these gentlemen arrived.

Q. And this was the first time that you saw these gentlemen after they arrived, was in this room just prior to the time that Mr. Podlesak arrived?

A. I don't remember just where I met them, in the room or in the lobby, or whether they came to my office even. It has been about two years ago, and I can't state definitely those details, but I remember distinctly that very soon
378 after I saw them Mr. Podlesak also came in, as they were very anxious to get in touch with him.

Q. And did he bring his brother with him?

A. No, sir.

Q. Then how was it signed, if his brother was not with him, by his brother?

A. Well, you are now referring to the first day that they came here, or immediately when they arrived. The brother, as well as I remember, did not enter into this conference until the next day.

Q. Well, then, the option was not signed until the next day?

A. No, sir; the option was signed the day after Mr. VanDeventer and Mr. Clement arrived, as well as I remember, which I think was the first day that Mr. Podlesak, the brother of Henry—Emil I believe his name is—came into the conference.

Q. Well, then, was the option prepared ready to be signed when the two brothers came in?

A. Oh, no, sir; there was considerable discussion on the subject before any option, because that was altogether the result of matters that had developed at this conference.

Q. How long was the conference after the brothers came in, after the two Podlesak brothers came in, how long did it last?

A. As well as I remember, it was pretty much all of the next day. I think Mr. Emil Podlesak came in near noon, as well as I remember.

Q. Then they did not come together?

A. No, sir.

379 Q. Let us understand that: After these two gentlemen had come up, after these two gentlemen had met you in the room of the hotel on the first occasion and you had talked over these matters at short length, Henry Podlesak came in—is that true?

A. I have just stated that I did not remember any of those details at all. I simply remember that when Mr. VanDeventer and Mr. Clement, these attorneys, came here, that they asked to get in touch with Mr. Henry Podlesak, and I don't remember just when he came in, but I know it was soon after they arrived in Chicago, and then the following day Mr. Emil Podlesak came in; but I don't think that Mr. Emil Podlesak was seen at all the first day.

Q. Now, how long did you and Henry and Mr. Clement and Mr. VanDeventer talk about these things the first day?

A. I don't remember, but I presume most of the morning or afternoon. I can't recall whether it was the whole day. I was just trying to think whether we went to lunch together or anything like that, but I don't recall those details.

Q. But you do mean to say that there was an extended conference after Henry had appeared on the scene?

A. Oh, yes, they had a great deal to talk to him about in connection with the Milton-Varley patent as referred to in that letter there.

Q. Anything else?

380 A. And these Podlesak patents and the Webster contracts and matters of that kind.

Q. So that everything was very carefully and thoroughly discussed between those two gentlemen, yourself and Mr. Henry Podlesak on that occasion?

A. I don't think I had very much to do with the discussion at all. As well as I remember, that was handled entirely by the attorneys and Mr. Podlesak.

Q. But there was an extended conference at which these matters were all talked over, whatever they were?

A. Well, I have just explained the talk that we together—

Q. Is that true or not?

A. I have just explained the talk that we had together.

Q. Well, they were talking all the time about this; they didn't have anything else to talk about, did they?

A. I could not tell you that, sir.

Q. Well, you were there?

A. Yes, sir.

Q. And then Henry Podlesak went away with a promise to bring his brother, did he?

A. I presume so.

Q. Were you present at the next meeting?

A. Yes, sir.

Q. When did that take place?

A. I have just stated, as well as I remember, it was the next morning or afternoon.

Q. In that room, the same place?

A. I think it was in the same place; yes, sir.

Q. And then the two Podlesaks turned up together?

A. I don't remember whether they came in together or not, sir.

381 Q. How long were you there with those two gentlemen before either Henry or Emil came in?

A. I don't remember.

Q. But you do remember that there was another long conference?

A. Yes, sir; I have just said there were these conferences those two days.

Q. Yes, but now I am directing your attention to the second conference at which Emil was present. How long did that conference take place?

A. Well, I have also stated that it lasted during the better part of the day, but I don't remember whether it was all of the forenoon and all of the afternoon, or any of those details.

Q. Well, everything was considered with reference to the purchase of those patents that you could think of at this second meeting?

A. The whole matter was—

Q. Carefully considered?

A. Was disposed of, I might say, at that meeting, as that was the only meeting that was had on this subject, was when Mr. VanDeventer and Mr. Clement were here and took those matters up with Mr. Henry Podlesak, and then with the two brothers, which resulted in the option that was given in my name.

Q. And at this second meeting the option was prepared?

A. Yes, sir.

Q. And executed by the two brothers?

A. Yes, sir.

Mr. Wright: I wish you would go back and read. I think he made a mistake. I think he meant "meetings" when he said "meeting."

(By request of counsel the evidence of the witness as referred to was read by the Commissioner.)

The Witness: That is exactly as I remember it.

Q. If you will omit "as I have said before," those superfluous remarks, I will now direct your attention to the fact that there were two meetings, weren't there?

A. Yes, sir; these gentlemen were here on the two days.

Q. Were there two meetings at the hotel room?

A. There were the two meetings, as I have just stated—

Q. Will you please leave that out? It is entirely unnecessary for you to say "as I have just stated." I want a clear, consecutive statement, and you have not given it yet as I understand the record.

A. I am trying to understand what you want to know, and just as soon as I do, intelligently, I will try to tell you the facts as I know them.

Q. If you will stop "trying" and really "understand" we will get along faster.

Mr. Wright: Read the question, Mr. Stephens.

(The question referred to was read by the Commissioner as follows:)

"Q. Were there two meetings at the hotel room?"

A. There was the conference of the first day between 383 Mr. Henry Podlesak and the attorneys and myself, and the conference at the second day between the same parties and also Mr. Emil Podlesak.

Q. At which Henry Podlesak was present?

A. By the same parties, I have said.

Q. Now I ask you if it was carefully considered and you said it was disposed of. When you disposed of it you did carefully consider it, didn't you?

A. Well, I don't know just what you mean by being carefully considered. The matter was discussed there to the extent of securing an option from the Podlesak brothers, as I have referred to.

Q. Well, I mean by "carefully," was everything discussed in reference to what you were getting in that option to buy those contracts?

A. That is a matter that was handled entirely by the attorneys and I didn't pay any attention to those details at all.

Q. Don't you know what was said there with reference to buying those contracts, as to their contents?

A. I can tell you in a general way that, as I understood it, the Podlesaks had some good patents to sell which our attorneys decided they might want to buy.

Q. Did they say anything about the royalties?

A. I presume those matters were discussed, as disclosed by the agreements with the Webster Company which, as 384 I understood it, were also considered.

Q. Why do you say "presume"? Do you know of your own knowledge?

A. Well, I don't remember those details, Mr. Wright.

Q. Do you mean to tell me that you don't know of your own knowledge whether the question of royalty was discussed there or not?

A. Of course, it was discussed, as I stated.

Q. Why do you say that you presume they were discussed?

A. Because I prefer to say presume.

Q. Then you mean that you don't know in the first place whether the question of royalties was discussed or not?

A. I don't know to what extent they were discussed. They were mentioned in those conversations. Now I don't know how much that question of royalties concerned our attorneys, and I am not competent to answer those questions and go on record here as saying that this or that is a matter of fact. I can only tell you what I remember regarding these circumstances.

Q. Did you or did you not discuss anything about royalties at either of those two meetings?

A. I don't think that I personally discussed anything about the royalties.

Q. Did the contracts disclose how much royalties they were paying at that time?

A. They did.

Q. What contracts did you have before you which disclosed this?

A. I did not personally read the contracts, but I heard them discussed, and they were the contracts existing between the Podlesak brothers and the Webster Electric Company.

Q. The two contracts dated September 4, 1914?

A. I don't remember anything about the dates.

Q. Were there more than two contracts there?

A. I don't remember.

Q. You did not examine to see what they did disclose?

A. No, sir; I didn't.

Q. You don't know whether they disclosed in dollars what royalty was being paid at that time?

A. No, sir; the matter was being handled entirely by these attorneys, and I didn't pay any attention to it.

Q. Now, there was the right to make a unitary plug and bracket under those contracts, wasn't there?

A. I don't know what they covered.

Q. You did not examine them to see whether the Podlesak patents covered the right to make a unitary plug and bracket?

A. I have just stated that the—

Q. If you will please leave out the words "I have just stated" we will save a lot of good ink and paper here and save your time incidentally. Now answer that question.

A. What is the question, Mr. Attorney?

Q. (Read by the Commissioner)

A. No, sir; I did not.

Q. Did you examine them to see whether they covered the right to manufacture the tri-polar device?

A. I personally did not examine them to discover anything.

386 Q. Were the patents there—did Henry Podlesak bring in the patents?

A. I don't remember.

Q. You said at the last examination that you were getting an option for a contract that would give you the right to go into the same field that the Webster people were in with the same device of a unitary plug and bracket. Now I wish

you would tell me just what your idea was with reference to that field that you were to go into. What field was it?

A. The gas engine field.

Q. The manufacture and sale of the same devices—to manufacture devices that would do the same work as the Webster magnetos would do?

A. Well, we were already manufacturing a device in the plugoscillator, VanDeventer plugoscillator, to do the same work; but I understood that these patents of the Podlesaks would give the additional right to manufacture the same equipment as the so-called Webster-Podlesak outfit, with the exception of the tri-polar magneto.

Q. Now, you didn't want to go into competition with the Webster people; you had your own customers and your own field that you wanted to occupy, didn't you?

A. We did before we acquired the Podlesak patents.

Q. But after you acquired the Podlesak patents how did your intentions change with reference to the field that you proposed to occupy or endeavor to occupy?

387 A. Well, we were collecting royalties then from business that the Webster Company were supplying in that field.

Q. And you did not want to interfere with those royalties?

A. No, sir.

Q. You were perfectly satisfied to rather help to increase the amount of the royalties rather than to decrease them?

A. Yes, sir; we would rather see them increased than decreased, of course, but we wanted to be in a position to handle any of that business that we may see fit to.

Q. Now, you bought also the right to use the name "Podlesak," didn't you?

A. I don't know, sir.

Q. You did not examine the contracts to see whether they had the right to use the name "Podlesak" in them or not?

A. I don't think so.

Q. You didn't care whether the name "Podlesak" was part of the right acquired under those contracts?

A. No, sir.

Q. If the contract provided that you were under obligation to use it you would prefer not to?

A. No, if we used the Podlesak device I would want to use it.

Q. I see, but if you did put your name on the product then you would—with the device marked "Podlesak" that

would not in any way in your intent interfere with the business of the Webster people?

A. No. I did not attach any importance to the name "Podlesak" at all.

388 Q. Why would you prefer to use it then? You said a moment ago that you would.

A. Because I would want the distinction clearly known between the VanDeventer machine and the Podlesak machine, and for a certain class of service we would get better results from the VanDeventer machine.

Q. Do you put VanDeventer's name on your plugoscillators?

A. No, sir.

Q. Now, when you took this option you were not taking it for yourself, I think you said?

A. No, sir.

Q. You said you were not taking it for yourself?

A. No, sir.

Q. You were taking it for those parties for whom you were working, whether it was the Sumter or whether it was the Splittdorf?

A. Yes, sir.

Q. And whatever rights you got under the option, when the option was exercised they would have the right to exercise it?

A. Yes, sir.

Q. And you so understood at the time that you took it, did you? You nod your head yes. Is that what you mean?

A. Will you state the question again? I was thinking of something else.

Q. (Read by the Commissioner)

A. Yes, sir.

Q. Now, that option when exercised carried the title to certain royalties. You understood that?

A. Yes, sir.

389 Q. And you understood also that for the purpose of finding out what those royalties were, that the contract carried the right to examine the books of the Webster people, didn't you?

A. Yes, sir.

Q. Now, you also understood that you were buying the right to enforce those payments of royalty under those contracts?

A. I presume so. I do not—

Q. Well, if they did not pay the royalties you would have made them pay them, wouldn't you?

A. I certainly would have if I could, if it was my individual matter.

Q. That was what the money was being paid for, was to get hold of those royalties and you were going to buy them; if it was necessary to enforce the payment of the royalties you would enforce that?

A. We of course, would do whatever was necessary to secure all the rights we were entitled to under the purchase of the patents and agreement with the Podlesak brothers, from the Podlesak brothers.

Q. Now, if there was a default in any payment of royalties, why, you would enforce that default if it was necessary, wouldn't you?

A. Yes, sir.

Q. And as a matter of fact, there was a default claimed by Henry Podlesak at the time that this option was made, wasn't there?

A. I think there was; yes, sir.

Q. And as a matter of fact, he did declare a default 390 under that so-called neglect of the company to keep its contract with him; he as a matter of fact, after you had purchased did declare a default, didn't he?

A. Well, I remember there was some talk about something of that kind, but as to just what was done I do not remember, beyond the fact in connection with that matter our attorneys asked me something about whether it would make any difference whether the—I am just trying to think now how the matter came up; but so far as I am concerned I stated that I did not see that it was necessary in view of the fact that they said that by not forcing that payment, or whatever it was, that the matter would be adjusted properly by proper accountants at the disposition of a law suit which is in effect between the Splitdorf Company and the Webster Company.

Q. That is to say, these accountants would examine the books and report to you what was the fact?

A. Yes.

Q. And the royalties due?

A. Yes, that that matter, if there was any error made in the payment of royalties, that, of course, it would be rectified by the Webster Company when any such error might be located.

Q. And your attorneys told you that—or that is what you said to your attorneys?

A. No, I said there was a discussion along those lines.

Q. When was that?

A. That was in the early part of this law suit between the Webster Company and the Splitdorf Electrical 391 Company.

Q. So that there was a talk at that time that there would be necessarily an examination, in the interest of these people who were entitled to the royalties, of the books of the Webster Company?

A. I don't remember the details of that at all. I am just giving you that information as I remember, something about the question of whether the amount of royalties paid had been verified by whatever conditions were provided in the agreement.

Q. Now, while this talk was on, you say it was while these proceedings were pending in the Federal Court here another default was declared by Mr. Podlesak?

A. Well, I don't remember how many defaults it was or anything about it.

Q. Well, he said that he did it under power of attorney from the Splitdorf and Sumter people. Do you know anything about that?

A. Well, if he did, that was a matter I didn't have anything to do with.

Q. It was afterwards withdrawn. Did you know anything about the withdrawal of it?

A. No, I didn't know anything about those patent legal matters.

Q. That is, as you understand it, nothing is to be done in the examination of books of the Webster people with reference to these patents, pending this litigation?

A. So far as the Splitdorf Electrical Company is concerned.

392 Q. And so far as the rights under these patents are concerned?

A. I don't know what other rights there may be or anything about any rights the Podlesak brothers may have. I am only speaking, of course, from the interests that I am associated with.

Q. And the interests that you are associated with refer entirely to these Podlesak patent agreements which those interests have acquired?

A. Yes, sir; since they have become the property of the Splitdorf Electrical Company.

Q. Therefore, any examination of the books of the Webster people for trade purposes, which are not necessarily included in these two agreements in specific terms, as to such examination that you might want or might require—is that what you mean?

A. No, sir; I would not want any information whatever pertaining to trade matters in connection with the Webster books at all.

Q. But as to everything concerning these patents, as to those you are willing to let those stay just exactly as it is until the disposition of the law suit?

A. Why, I have no interest whatever or the company has no interest whatever in the Webster Company's books except to verify the payment of the proper amount of royalties under the contracts that we have acquired.

393 Q. Now, you have told me that you are not entirely familiar with all the things that the attorneys are doing in this matter?

A. Yes, sir.

Q. They might be after something that you don't know anything about, might they not?

A. I don't think they would be because I handle the sales business entirely of the Company, and if there were any trade matters that they would be interested in they naturally would ask me about that.

Q. You are not in close touch with the litigation that the Splitdorf people are conducting; are you, with reference to the Webster patents?

A. No, that matter is being handled by our attorneys, and I only am familiar with it in a general way.

Q. Are you a stockholder of the Splitdorf Company?

A. Yes, sir.

Q. Are you an officer of the Splitdorf?

A. No, sir.

Q. I think you stated you were an agent of the Splitdorf Company, appointed to have process served upon you within this jurisdiction—is that so?

A. I am an agent here; yes, sir—whatever that means.

Q. Now, at this meeting—at either of these two meetings held at the hotel, at which you were present, was there anything said as to the right of the Podlesaks to manufacture any of these devices as a personal right to them alone, which

they could not sell and assign to anybody—or assign to
394 anybody?

A. Not as I remember. As I understood it, that was a right which would be assignable with the patents.

Q. And the question as to whether the Webster Company might claim under that contract, that it was a right personal to the Podlesaks, that question did not come up at either of those meetings?

A. I don't remember that detail.

Q. Well, do you call that a detail?

A. Well, that matter. I don't know that the matter was discussed.

Q. Well, it was the smallest thing that you were considering about the whole thing, as to whether anything of that kind could happen, whether there could be a personal right of the two Podlesaks to make, use and sell any of those devices?

A. All I remember is that the matter was being considered there, and the purchase of the patents and contracts would convey to the Splitdorf and Sumter Companies the right to manufacture those devices except this particular machine with a tri-polar magneto, which was explained to me as a magneto that the Webster Company had an exclusive license under.

Q. Now, one question as to that: If you had declared a default, why, it would have put the Websters out of business as to the manufacture of the tri-polar device, wouldn't it?

A. I don't know anything about that, sir.

Q. Well, if you declared a default, or anybody should,
395 anybody who took that option should declare a default as against the Webster Company on the right to make, use and sell exclusively the tri-polar device, they could not make it any more, could they?

A. I don't remember anything about that, Mr. Wright.

Q. Well, you know as a matter of fact they could not do so; you would have a right to do it, wouldn't you, or the people who bought that option, that bought the right?

A. Would have bought the right to do what?

Q. To make the tri-polar magneto?

A. That the Sumter would have the right?

Q. Whoever owned the patent, whoever took over the option from you would own it?

A. I know the matter was considered as very unlikely because I know at no time did the Sumter Company ever

evinced any interest in the manufacture of the tri-polar magnet.

Q. Now, get the question. If there was a default—you mean manufacture or sale, do you?

A. Manufacture or sell.

Q. Now, if the people who took over your option enforced a default against the Webster Company they would not have the right then to manufacture the tri-polar device and your people would— isn't that true?

A. (No response)

Q. That is a trifle too deep for you?

A. Yes, it is.

396 Mr. Wright: Read it to him.

Q. (Read by the Commissioner)

Mr. Wright: I mean the Webster Company would.

A. I don't know.

Q. Don't you know what you were getting an option for?

A. My attorneys did.

Q. But you did not interest yourself?

A. Not especially.

Q. And you didn't notice whether there was any discussion as to the personal right to the Podlesak—and they were your attorneys then, weren't they; they were representing you in getting this option?

A. They were the attorneys; they were the attorneys of the Splittorf and the Sumter Companies.

Q. Your attorneys would understand that you were acting for them?

A. I can't say that they were my attorneys. They drew this option in my name, and it was given, the option was given in my name. You know how attorneys do.

Q. Then you did not claim any interest in this option at all; you were acting for somebody else?

A. Why, as I stated before—

Q. Just leave that out. Yes or no—you were acting for somebody else?

A. For somebody else; yes, sir.

Q. And these attorneys were the attorneys for the people for whom you were acting?

A. Yes, sir.

Mr. Wright: All right, now go back to that question.

397 (The question referred to was read by the Commissioner.)

Q. You don't know then whether there was any discussion

as to the personal right, or you don't remember whether there was any discussion as to the personal right of the Podlesaks to make, use and sell the unitary plug and bracket—

A. No, sir.

Q. —or any of the devices covered by any of those contracts?

A. No, sir; those were matters that were being considered by the attorneys, and I don't remember the details.

Q. Was there any suggestion that it might be claimed by the Webster people that the rights to the Podlesak brothers to make, use and sell the unitary plug and bracket was a personal right to them, that is, to the Podlesaks?

A. I don't think it was at that time.

Q. The lawyers in examining these two contracts, which you say were before them, did not consider that?

A. I don't remember that they did.

Q. Now, do you know of the Union Foundry & Machine Company of Ottawa, Kansas?

A. Yes, sir.

Q. Do you know that they are customers of the Webster Electric Company?

A. I think they are.

Q. And use their devices on their engines?

A. Yes, sir; they have also been customers of ours for several years.

Q. They are using your devices as well as the Webster devices?

398 A. Yes, sir.

Q. They are using the Webster devices at the present time?

A. I don't know.

Q. Were the Union Foundry & Machine Company using the Webster devices along in November and December, 1916?

A. I could not tell you. I don't remember.

Q. You knew they were using yours?

A. Yes, sir.

Q. Well, you ought to know whether they were using yours entirely, or whether they were using yours partially and some other concerns. You were sales agent?

A. Yes, sir; but I am not familiar with the details. I can very easily find that out, I suppose, but I don't remember whether they were using the Webster at the same time they were using ours, or not.

Q. Well, were they using yours on all their machines?

A. I cannot tell you that. I don't think they are.

Q. If you don't think they are, then you ought to inform yourself about it, if you are in the field and not trying to interfere with the Webster people—isn't that so?

A. I don't know as I am trying especially not to interfere with the Webster people.

Q. I thought you said you didn't want to interfere with the Webster people because you wanted to increase your royalties.

A. We do not make it our business to interfere with the Webster people, but I don't remember in this particular 399 case whether they were customers of the Webster Company or not.

Q. You would not take the pains to find out whether they were or not?

A. No, sir; but if they were using the Webster equipment and wanted to buy ours, I would sell them if they wanted to buy our equipment.

Q. That would interfere with your royalties?

A. I can't help that. That is what I would do.

Q. You would do the same with the Demster Mill & Manufacturing Company of Beatrice, Nebraska, if you found out that they were using the Webster Company apparatus and wanted yours, you would go and sell it to them?

A. If they preferred ours and wanted it, I would certainly sell it to them.

Q. Then you would go into competition with those two companies as against the Webster people and displace the Webster devices there if you possibly could.

Q. Would your men go ahead and try to do that?

A. Not in that way; no, sir.

Q. Have you a salesman by the name of Bennett?

A. Yes, sir.

Q. Did he go to those two companies and undertake to solicit business for your apparatus?

A. He probably did. That is what he is paid for.

Q. And you would approve of his going to those two particular companies and trying to displace the Webster apparatus that they were using?

400 A. Well, sir, I would tell him that it was all right for him to get all the business the customers wanted of the equipment that we were in a position to furnish.

Q. Whether they had Webster stuff on their engines and it displaced that or not?

A. Yes, sir.

Q. And give him a line of talk to displace the Webster?

A. I don't recall that any of—

Q. Well, I say, you would approve of it?

A. I would not hesitate to do that.

Q. You would not hesitate to do that?

A. No.

Q. Do you know the Stover Engine Company?

A. Yes, sir.

Q. Did you substitute your devices on their machines and displace the Webster devices?

A. I don't know.

Q. And that same is true of the Stover Engine Company—did you not sell them your devices and displace the Webster—you would not hesitate to do it?

A. Not if they wanted to buy them, sir.

Q. Well, as to the Emerson-Brantingham Company of Rockford, Illinois, did one of your salesmen sell them any of your goods and displace the Webster apparatus?

A. I don't know, sir. We have recently sold them some rotary magnetos; but, Mr. Attorney, I would not hesitate to sell any concern in the country that wanted to buy any of our stuff, whether the Webster Electric Company were selling them or not. But the Webster Electric Company, so far 401 as their selling them, and if they are not buying the equipment from us, I would rather see them buy it from the Webster Electric Company, because then we are getting a royalty out of the business that the Webster Electric Company does with them.

Q. Don't you know that the Emerson-Brantingham Company were handling the Webster devices exclusively, and didn't your Mr. Kaiser go over there to get them to take some of your devices and displace the Webster?

A. I don't know what they displaced or anything of the kind.

Q. In connection with your statement, that you would rather see the Webster machines in use to increase the royalties, it is also true that you would not hesitate to decrease the royalties if thereby you could get business for your company?

A. If the customer prefers to do business with us; and rather than have the customer buy the equipment from some competitor, where neither the Webster nor ourselves are being benefitted.

Q. But there was no other competitor in either of these cases. What I want to have you understand is that the question is directed clearly to this point: that where the Webster Company is supplying, you propose to go in and compete with the Webster Company and get your devices in place of the Webster?

A. If the customer wants our equipment I would sell 402 it to him if I could.

Q. And you would solicit it and you would urge him to do it?

A. Why, I would not tell him not to.

Q. You would urge him; you would send a salesman out and have him give him a line of talk?

A. I haven't issued any special instructions along those lines, to go out and get business that the Webster Company is handling; in fact, I have told the salesmen to let that business alone as much as possible, and take care of the other in which we are more interested in getting.

Q. And when they do not let it alone you approve of their acts?

A. Well, I understand they have a perfect right to do that, and I have not disproved of it. I don't want any of them to do anything they have no right to do.

Q. Now, as a matter of fact, you don't want to sell the tri-polar magneto anyway?

A. No, sir.

Q. Or manufacture it?

A. No, sir.

Q. Or have anything to do with it?

A. No, sir.

Q. You would rather have the Webster people make it and sell it?

A. Yes, sir.

Q. And there never has been a time since these matters came up, and you took that option, that you wanted to sell the tri-polar mageto?

A. No, sir.

Q. Now, do you remember a meeting that was called at Mr. Becker's office to consider this litigation about a 403 year ago?

A. Yes, sir.

Q. Do you remember who called it, or at whose suggestion it took place? Was it at the suggestion of Mr. Peaks?

A. Mr. Peaks or Mr. VanDeventer—I don't remember which.

Q. Who is Mr. Peaks?

A. Mr. Peaks was a member of the firm of Gann & Peaks, attorneys.

Q. For whom?

A. The Splitdorf Electrical Company.

Q. Did Mr. VanDeventer come from South Carolina to attend this meeting?

A. I don't remember that. I don't remember how he happened to be here at all.

Q. But he was here?

A. Yes, sir.

Q. Do you remember who was present at that meeting?

A. Yes, sir.

Q. Who?

A. Mr. Peaks and Mr. VanDeventer and myself.

Q. And Mr. Brown there (indicating)?

A. Yes, sir; Mr. Brown of the Webster Company; Mr. Becker, I believe.

Q. Was Mr. Webster there, T. J. Webster?

A. I don't remember whether he was or not.

Q. Do you remember that you made a proposition that your company, the Sumter Electrical Company of Illinois, was a sales organization?

A. Yes, sir.

Q. And that it would be willing to take—that it desired to take over the sales of the Webster products and let the Webster Company continue in the manufacturing line only?

404 A. No, sir; I did not make that proposition.

Q. Who did make it?

A. I don't know that anybody did.

Q. Was it suggested there?

A. I think it was one of the things suggested; yes, sir.

Q. You don't know who suggested it?

A. I think Mr. VanDeventer made the suggestion.

Q. Did you approve of it?

A. I said that I would consider it, and it was arranged for Mr. Brown to meet me in Chicago to see if we could get together on any practical basis or proposition.

Q. Well, do you remember that Mr. Brown got up and said that in view of certain devious ways and the reputation of the Sumter, that he was not willing for the Sumter Elec-

trical of Illinois to take over the sales of the Webster product and come in touch with their trade, for the reason that their methods of doing business might not agree?

A. I remember that Mr. Brown did agree to meet myself to discuss ways and means if possible to bring about a proposition covering such an arrangement, but Mr. Brown and myself never had any conference on the subject.

Q. Did he say in effect what I have just asked you at that meeting?

A. I don't remember that he did.

Q. What did he say?

A. I don't remember what he said.

Q. Didn't you urge it and discuss such a proposition, which you say Mr. VanDeventer made?

405 A. I don't believe that I could because I never approved of it and heartily disapproved of any such an arrangement, and finally brought the matter to the attention of another one of the organization and it was decided to dismiss it entirely.

Q. Now, didn't the remarks that Mr. Brown made, to the effect which I have quoted, lead you to say—and I want to refresh your memory—didn't such a suggestion from Mr. Brown lead you to say something like this: "Well, Henry Podlesak has painted you fellows—the Podlesaks have painted you fellows with horns to us, and maybe they have painted us with horns to you"?

A. I never made any such statement.

Q. Did you suggest at that meeting that the Podlesaks had made representations of any name or nature to you or to anybody that you represented against the Webster people or Mr. Brown or anybody connected with them?

A. Well, I don't remember anything of the kind. I may have—I can't remember having heard the Podlesaks say anything about them. I would like you to state that again. Let me see if I can recall it.

Mr. Wright: Read it.

Q. (Read by the Commissioner)

A. As far as I remember, I positively made no such statement.

Q. Was anything said by you that you can now recall, that the Podlesaks had made any statements to you unfriendly, 406 threatening or in any way antagonistic to the Webster people or derogatory to them, the Webster people?

A. Well, Henry Podlesak has made some statements which

would indicate that he was not on the best of friendly terms with the Webster Company or Mr. Brown.

Q. Well, what has he said?

A. I don't remember. Just as I stated in that letter there, I see I used the expression that if Mr. Brown and Mr. Podlesak—oh, no, if Mr. Brown was obsterperous—I don't know just what that word means—or if that relationship continued between the Podlesaks and Mr. Brown that he would no doubt be interested in—

Q. In getting in?

A. I was trying to think what the letter states.

Q. The letter will speak for itself. Don't you mean that there was a whole lot of threats made by Henry Podlesak against Brown and against the whole concern up there?

A. Oh, I can't say that there were any threats made. He did talk to me at times about feeling that they were having some trouble there at the Webster plant, and his brother was dismissed, had been thrown out or had retired or something of the kind, and there was not the best of feeling existing, and that that was the reason that they were going into the manufacture of Podlesak plugoscillators.

Q. What did he say about his feeling? He showed a good deal of animosity, didn't he?

407 A. Well, he seems to me to be interested in it, of course, on account of his brother.

Q. Didn't he show a good deal of animosity toward Mr. Brown and the Webster people?

A. Well, I can't say that he showed any particular love for them.

Q. Well, give us an answer. We are entitled to an answer.

A. Well, now, I really am unable to say, Mr. Wright, that he made any threatening remarks to me, but just in casual conversation he would say little things that left me under the impression that I have expressed in that letter to Mr. VanDeventer, but I don't remember anything in particular that he might have said that would be obnoxious.

Q. At this meeting at which Mr. Becker was present, didnt' you and Mr. VanDeventer state that Emil Podlesak was very bitter against Mr. Brown and the Webster Company, and had made a lot of statements to you showing his bitterness?

A. Mr. Wright, I never made any such statement as that.

Q. Did you say or Mr. VanDeventer say that that was why he was going into business, and that was why he wanted to sell out to you and to the Splitdorf and Sumter people?

A. I have just stated that I don't remember of making any—I may have said something, but I don't recall making any remarks like that in that conference, although I do remember that we were very frank there, and possibly something was said to indicate that the Podlesaks had not left us under the impression that they were any too well pleased with their dealings with the Webster Electric Company; but as to these specific statements, I really don't remember. I don't think I had a great deal to say on the occasion of that meeting at all.

Q. Did you know that the Splitdorf and Sumter people made a joint and several answer to the bill of complaint of the Webster people against the two Podlesaks and themselves pending in the District Court of the United States for the Northern District of Illinois, Eastern Division?

A. I know we are having—that the Splitdorf and Sumter Company and the Webster were having and are having a lawsuit; but as to the proceedings in that case I am not competent to express an opinion.

Q. Well, you did attend there?

A. Yes, sir.

Q. And testified once as to service of process?

A. Yes, sir.

Q. At that time you were served with process as an officer of the Sumter Company of South Carolina, and you testified with reference to that service?

A. I remember that I testified in that case, but I don't recall those details.

Q. Well, you tried to defeat the service by testifying that the service was not correct, didn't you?

A. I think there was such—I don't know what suit this is—would you ask me that again, sir? I don't know what you are getting at.

409 Q. (Read by the Commissioner)

A. I don't remember, but I know there was something about some error in the service.

Q. And you testified that that you were an officer of the company, and the service was held good?

A. Well, I testified in accordance with the facts, but I don't remember these details.

Q. Now, did you furnish all the evidence to the attorneys that was necessary to prepare the answer that they filed for the Splitdorf and Sumter Company in that suit?

A. I don't recall that I furnished any of it.

Q. You really don't know anything about this answer then that was put in by the Splitdorf and Sumter Companies?

A. I know that I personally didn't have anything to do with it.

Q. I want to take your mind back again to those two meetings at the hotel, and ask you whether anything was said about any representations which Mr. Webster had ever made to the Sumter Company, that the Podlesaks were owners of these various patents?

A. I don't remember that that matter came up at that time, but I do remember such a reference in connection with the Splitdorf and Webster law suits.

Q. Then prior to the time of you taking the option, it had never been discussed that there was any such letter directed by Mr. Webster to the Sumter Electric Company of South Carolina; it came up long after that?

A. I don't remember anything about that, whether it was before or after.

Q. Then you have absolutely no recollection of anything having been said about it at these two meetings or prior?

A. Absolutely no recollection.

Q. I think you have already testified that you are not familiar with the contents of the bill brought by the Webster Electric Company against the Sumter Electrical Company of South Carolina, which was pending in the Federal Court in South Carolina at the time that you took this option?

A. I don't think I had ever seen any of the record in the case at all.

Q. Then you were not relying upon any statements that were made in that litigation in the bill or in the pleadings at the time that you took this option?

A. I was not relying personally upon any of those things because the matter was being handled entirely by the attorneys.

Q. And it was not discussed at this time, at the time that you took the option?

A. I don't remember that it was.

Q. Then you don't know whether it is true or not, as alleged by the Splitdorf Company, that they were relying upon a letter of Mr. Webster, or the allegations in that bill that I have called your attention to, at the time that this option was taken by you?

411 A. Well, I believe that the answer so stated that they were, but I don't remember.

Q. But there was nothing said, so far as you know, about it at the time that you took the option?

A. I don't—

Q. You don't recall it?

A. I don't recall it those times.

Q. You have no recollection of it?

A. No, sir. That was a matter that was being handled entirely by the attorneys, and I didn't pay any attention to it as it concerned things that I know very little about.

Q. Well, as a matter of fact, you don't seem to be able to tell anything about what did take place at those meetings except that you went there for the purpose of getting this option?

A. No, I didn't go there for the purpose of getting the option at all.

Q. What did you go there for?

A. I went there to be present at a conference with Mr. Clement and Mr. Van Deventer, these attorneys, and Mr. Podlesak, which resulted in the option that we got.

Q. Now, you also understood when you were taking that option that the Podlesaks had to make good on that title to you if you took it up; they had got to make good on all they were selling you, hadn't they?

A. Well, I presume that the lawyers would not consider anything that could not be made good. I don't know anything about those details.

Q. Well, they would have to make some promises of warranty, and they would have to live up to their promises; you understood that?

A. I presume that whatever was necessary to protect the interests of the Splitdorf and Sumter Company was attended to by the attorneys, but as to the details I do not remember.

Q. Well, you would not buy a pig unless you knew the man that was selling it to you owned the pig, would you?

A. I certainly would not.

Q. And you were an officer of this company, and you were there to see as to everything except purely legal matters?

A. No, I was there to listen to that interview, and to see what the attorneys thought was best to be done in the interests of the company.

Q. And what you wanted was the title, of course?

A. What I wanted was what they wanted.

Q. Suppose they had told you that there wasn't any title there, then what?

A. If they had told us there wasn't any title there, I am very sure that we would not have concluded the option; we would have quit the thing.

Q. Then they must have advised you that there was something there that you wanted, or you would not have gone on and advised your company to pay \$70,000, would you?

413 A. I certainly would not. The attorneys satisfied themselves that whatever the Podlesaks were selling they were entitled to, and that they could make proper and legal transfer of their rights in the matter.

Q. And that they would guarantee them?

A. Well, I presume they did. I am not much of an attorney myself, but if I had been drawing the papers or making the deal personally I certainly would have seen to that.

Q. Now, that your people have taken up that option, why, they are going to insist on having the Podlesaks make good on what they sold them, aren't they?

A. I presume so. I presume they have made good.

Q. Well, if they don't make good I presume that you would presume that they would presume that it would be their duty to do it—is that true?

A. It would be their duty to do it.

Q. Well, I don't understand you when you talk about "presuming" and all those things. I am trying to have you answer a question.

A. You are asking me questions about legal matters that are very difficult for me to answer.

Q. No, I am not asking you questions about legal matters. I am asking you a plain business man's question, and that is, if you buy a pig if you expect to get title to it?

A. Yes, sir; I do.

Q. And you expect the fellow that sells you the pig,
414 if he hasn't got the title, you expect that he has got to make good on it, don't you?

A. Yes, sir.

Q. And if there is any question about the title you expect him to come forward and aid you in every form and shape possible to make good on the title to that pig, don't you?

A. Whatever is necessary to deliver what he sold me.

Q. And that is exactly what you understood the lawyers advised you about the Podlesaks in reference to this option?

A. The lawyers didn't advise me anything. They simply attended to that whole transaction and I didn't have any-

thing very much to do with it except that the paper was drawn in my name.

Q. Didn't you think that in taking that option you were getting something?

A. I certainly did.

Q. \$70,000 was going to pass on the strength of it, was it not?

A. Yes, that was the amount.

Q. Then you thought you were getting a title?

A. Yes, sir.

Q. And you thought that these men were under obligation to make good on that title to the extent in their power, didn't you?

A. I understood we have such title.

Q. And you understand that they are doing everything in their power to help you make that title good?

A. Why, we have the patents, and I understand—

Q. Answer the question. Are they or are they not doing everything up to the present time to make good your title?

415 A. They have made good.

Q. If there is anything to be done to make it good they are going to do it, aren't they?

A. Well, they are so far as I know.

Q. And if they are not you are going to make them do it?

A. Well, I would certainly think it would be necessary because we are going to have title to what we have bought.

Q. And you would expect them to fulfill their obligations to help you and aid you in every way possible with reference to the rights that you acquired under these options?

A. We would expect them to do whatever is necessary to complete a legal transaction.

Q. As specified in those contracts here?

A. Well, I presume so.

Q. Why do you say "I presume"?

A. Well, my dear Mr. Attorney, I don't know the legal status of the thing.

Q. My dear witness, you can answer a question without saying "I presume". Don't you know that when you say "I presume"—

A. Then I will tell you, I don't know.

Q. What?

A. I will just say I don't know.

Q. (Read by the Commissioner)

A. Well, I don't understand this question. I consider it a legal question and I will simply answer that I don't know. I don't know what you are driving at.

Q. Then you don't know whether the Podlesaks are 416 to carry out this contract or not with you?

A. They are certainly to carry out any contract with us or any agreement that they entered into with us to carry out, if it has not been carried out. As I understand it, everything has been carried out.

Q. Now, I ask you whether it is not their duty to make good that title that they have conveyed to you.

A. Well, I understand they have made good that title.

Q. Suppose they have not, do you understand that they are under obligation to continue to make good on it, or whether they are not to make good.

A. I don't understand anything about any of these questions you are asking me here, and I can only advise you as above because so far as the titles are concerned I understand that they are the property of the Splitdorf Electrical Company.

Q. If you have any rights under the two contracts which you bought, which you took an option on, which are in any respect unaccomplished or unfulfilled or in controversy, do you mean to say that you don't expect the Podlesaks to aid or assist you with reference thereto?

A. I expect the Podlesaks to do whatever may be necessary to complete their agreement with the Splitdorf Electrical Company, if it has not been completed. So far as I know, the whole matter is complete.

Q. Don't you know that it is in litigation?

A. I know that there is some litigation, but what that 417 litigation covers I could not tell you to save my life.

Q. And there is a question as to whether the Podlesaks have any right whatsoever to make that contract with the Splitdorf or Sumter people carrying out the option?

A. I don't know just what that law suit is about. I have tried to enlighten myself.

Q. Don't you know that the Webster people are attacking your right to make, use and sell these devices as provided in the Podlesak contracts which were taken under option by you?

A. I understand that there is some question of infringement there being considered.

Q. Don't you understand that the Webster Company

claims that the Podlesaks have no right to sell to you the right to make, use and sell under those contracts the devices as provided therein?

A. Yes, I think that is a part of the suit, but I don't understand its various ramifications at all.

Q. Haven't you openly discussed that with the trade, as to the claim of the Websters against your company or the Splitdorf Company?

A. I have discussed it and have stated that we own the Podlesak patents and the contracts under which the Webster Company manufacture the Podlesak magnetos.

Q. And haven't you stated that the Webster Company claim you have no right to purchase them?

A. I have understood that, and I may have stated that.

418 Q. Then if it is necessary for the Podlesaks to assist you or your company in any way to make good this sale don't you expect that they will do it?

A. I am sure they would do it.

Q. Well, don't you consider that it is the duty of the Podlesaks to make good the title that they have conveyed to you, or to your company, which is attacked by the Webster people?

A. If it has not been made good, I am sure they will make good.

Q. That was not the question. Isn't it their duty to cooperate in every way, form and shape to perfect the title to those contracts in you—isn't it their duty?

A. Well, I think it is everybody's duty to—

Q. Isn't it the duty of the Podlesaks?

A. Well, I don't know how to answer your question. I am simply going to say I don't know. I don't know what it is you are trying to bring out here. You are asking me a lot of things that I don't understand, and I am simply going to say, and very conscientiously too, that I don't know.

Q. Aren't there a lot of things you are afraid to understand, Mr. Manning?

A. No, sir; there is nothing at all that I am afraid to understand, Mr. Attorney, and I will tell you anything that I do understand as representing a fact; but you are asking me my opinion here on the subject.

Q. No, I am not.

419 A. You are asking me if I don't think it is the duty of those people to make good.

Q. I am asking you whether when you took this option, upon which afterwards \$70,000 passed, if it was not part of the consideration that the Podlesaks had got to make good on what they were selling you.

A. Well, I have told you that the matter is not handled by me personally at all; it is in the hands of our attorneys, and I am not at all competent to answer these questions as you have put them, and I don't know anything about it.

Q. Weren't you the general manager, vice president, member of the board of directors, and stockholder of the Sumter Electrical Company at that time?

A. No, sir.

Q. What were you?

A. I was vice president and secretary.

Q. A member of the board of directors?

A. Yes, sir.

Q. And a stockholder?

A. Yes, sir.

Q. Who was the general manager?

A. Mr. C. T. Mason.

Q. Did you approve and authorize the payment of \$70,000 to the Podlesaks in this transaction?

A. I did whatever was necessary for me personally to do to make it a proper transaction.

Q. And you mean to tell me that you bought that without really having any opinion at all as to what kind of a title you were getting or anything about it at all; that you were perfectly willing to leave that to somebody else?

A. Well, like most business men, I did what our attorneys told me was the thing for me to do. I had confidence in our attorneys.

Q. And you did not ask your attorneys whether there was any question of or dispute between the Webster people and the Podlesaks as to the title that they were conveying, and upon which \$70,000 passed?

A. Mr. Attorney, I did not ask our attorneys any of those things because they were, very much more familiar with the matter than I was, and I didn't have anything to do with that.

Q. Well, you were not very much concerned about this transaction anyway, were you?

A. Why, yes, I was concerned about it.

Q. You were the man that first brought it to their attention?

A. Yes, I happened to be in conversation with Mr. Podlesak and learned of his attitude in the matter, and in calling the matter to the attention of the attorney or rather Mr. VanDeventer, who was one of the attorneys in the matter, which has just been presented here, they and the Podlesaks got together, which resulted in all of this transaction.

Q. And you were perfectly willing to buy whatever the Podlesaks had. That was the point?

A. I was perfectly willing to buy whatever our attorneys thought we ought to buy, and wanted to buy.

421 Q. But you did not go into particulars of it—you left that entirely to them?

A. It was left to the attorneys, Mr. VanDeventer and Mr. Clement.

Q. Did they discuss in your presence the question of title?

A. I don't remember what they discussed.

Q. The question of who owned these patents did not come up at all there?

A. Well, we discussed that a little while ago in connection with a letter of Mr. Webster, and I stated that I did not recall whether that matter was mentioned in this conference or not.

Q. Just prior to that time the Webster people had got away some of your customers and supplied them Webster tripolar devices, hadn't they?

A. I don't remember.

Q. Where is the principal office of the Splitdorf Electrical Company?

A. Newark, New Jersey.

Q. Who is the president of the company at the present time?

A. John F. Alvord.

Q. Who is the vice president?

A. I can't tell you.

Q. Who are the members of the board of directors?

A. I can't tell you that, sir.

Q. Who is the general manager?

A. C. W. Curtiss.

Q. Where does he reside?

A. At the general office in Newark.

Q. And where does Mr. Alvord reside?

A. In New York City, I think—well, he is there whenever I have seen him, but I don't know what his legal residence is.

422 Q. Is Mr. VanDeventer an employee of the Splitdorf Electrical Company at the present time?

A. Yes, sir; and attorney in their patent matters.

Q. In the United States Patent Office, you mean?

A. I don't know what office. He is their attorney.

Q. And he is a patent attorney?

A. I mean that he is an attorney, but whether or what kind of an attorney—

Q. You don't know whether he is an attorney at law practising law generally, or whether he is only a patent attorney?

A. I think he is what you call a patent attorney.

Q. And he is exclusively in the employ of the Splitdorf Company?

A. No, he handles other cases outside of the Splitdorf.

Q. Where does Mr. Clement reside—is he at this time attorney for the company?

A. No, sir; he resides in Washington. He is not the attorney.

Q. Is Mr. Vandeventer a stockholder of the Splitdorf Company?

A. Yes, sir.

Q. Give me the officers of the Sumter Electrical Company of Illinois.

A. F. C. Manning, president; C. W. Curtiss, vice president; Charles Kratsch, treasurer; Frederick Secord, secretary.

Q. Who is the general manager?

A. Well, sir, there is no one elected to that office. I am manager of the business.

Q. I think you stated that the capital stock of the Sumter Electrical Company of Illinois is \$5,000?

A. Yes, sir.

Q. Do you know who the stockholders are?

A. Yes, sir.

Q. Who are they?

A. C. W. Curtiss.

Q. How many shares?

A. I don't remember; F. C. Manning—

Q. How many shares?

A. One share; and Frederick Secord—

Q. How many shares?

A. Those are the only stockholders I remember.

Q. Do you know how many shares Kratsch has?

A. No, sir.

Q. Or Secord?

A. No, sir.

Q. You are president of the company and sign the stock certificates, and you don't know at all except that you have got one share. Is that what you mean to say?

A. I know that I was given one share of stock; yes, sir.

Q. You don't know anything about that?

A. It was a matter that did not interest me especially because I knew it was being properly handled, and the facts in the case, of course, are all matters of record anyway.

Mr. Wright: That is all.

Subscribed and sworn to before me this day of May, A. D. 1917.

Commissioner.

424 Whereupon the hearing was adjourned to May 14, 1917, at 10:00 o'clock in the morning.

425 PLAINTIFF'S EXHIBIT 82.

426 IN THE DISTRICT COURT OF THE UNITED STATES

For the Eastern District of Wisconsin.

State of Wisconsin.

Ex Rel. Emil Podlesak,

Plaintiff,

against

Webster Electric Company *Et Al.*,

Defendants.

} Testimony.

Deposition of witness in the above entitled cause, Harry R. Vandeventer, said witness residing in the City and County of Sumter and State of South Carolina, to be used on the trial of the above entitled action, pursuant to the notice hereto attached and returned herewith, taken under the Federal Statutes, Sections 863, 864, 865, before Mark Reynolds, a notary public duly qualified and acting as such under the laws of the State of South Carolina, at his office in Law Range in said City, County and State, beginning on the twenty fourth day of May, 1917, at two o'clock in the afternoon and from

time to time thereafter as in the following transcript thereof set forth.

Appearances:

Arthur B. Wright, appearing in behalf of the defendants, no other appearances being made in behalf of parties.

HARRY R. VANDEVENTER, a witness called in behalf of the defendants herein, residing in the City and County of Sumter, State of South Carolina, pursuant to the notice hereto attached and under the Federal Statutes 863, 864, 865, being duly cautioned and sworn to tell the whole truth and being carefully examined upon oral interrogatories, deposes and says as follows:

427

Examination by Mr. Wright.

Q. I would like to have the records show that the witness appears before the commissioner in response to process duly served. You were served, Mr. Vandeventer, with subpoena of the Federal Court, returnable before the Notary?

A. Yes sir.

Q. You are here in obedience to this subpoena?

A. Yes sir.

Q. What is your name?

A. Harry R. Vandeventer.

Q. Where do you reside?

A. #206 North Church St., Sumter, S. C.

Q. What is your business?

A. General manager of the Sumter Works of the Splitdorf Electric Company, a corporation of New Jersey. I also act as attorney in connection with certain patent matters of that and some other corporations.

Q. Are you a counsellor and attorney at Law?

A. I am not.

Q. You spoke of the Splitdorf Company of New Jersey. Does it own at the present time the works in Sumter, formerly known as the works of the Sumter Electric Company of Sumter?

A. I am informed and believe that it does?

Q. Don't you know.

A. I am not an officer of that company. I have no way of ascertaining whether it does now or not.

Q. In whose employ are you?

A. Splittorf Electrical Co.

Q. So far as you know, the works here are under the charge and direction and claim of ownership of the Splittorf Company of New Jersey?

A. Yes sir.

Q. Who do you take your orders from?

A. Mr. C. W. Curtis.

Q. Who is he?

A. General Manager of Splittorf Electrical Company of New Jersey.

428 Q. Where does he reside?

A. #411 Ridgeway road, South Orange, N. J.

Q. What official connection did you have, if any, with the Sumter Electrical Company of South Carolina?

A. I was treasurer and general manager.

Q. Up to what time?

A. Up to the time of the dissolution of that corporation.

Q. When was that?

A. I will have to refer to the records. I cannot recall off-hand, but I think it was late in 1915, or early in 1916.

Q. Is there any way you can refresh your memory?

A. I said up to the time of the dissolution of that corporation. The dissolution papers were filed February 28th, 1916.

Q. When was the notice of dissolution acted upon by the Board of Directors of that Company, if you know?

A. On February 2nd, 1916, at a stockholders' meeting of the Sumter Electrical Company, at which all of the stock was represented, it was resolved to wind up the said corporation, and as a result of that meeting the petition for dissolution was filed February 28th, 1916.

Q. What was the first action taken with reference to dissolution previous to February 2nd, 1916?

A. I don't recollect, without access to the minute books.

Q. Let me refresh your memory by saying that an advertisement appeared in August 1915, that the Sumter Company was going to go out of business.

A. That would not enable me to state what official action was taken. That matter of dissolution of the corporation was discussed for some time prior to the actual action itself. It was discussed some time prior, in fact.

Q. How long before?

A. Probably six or eight months; possibly as long as a
429 year prior to that; on account of the fact that the Sumter
Company contemplated selling its physical assets, and
there would be no reason for the continuation of the company
after it sold its assets.

Q. When did it sell those assets?

A. Sometime along in July or August, or perhaps later,
1915.

Q. Was it before or after, that you and Mr. Manning, with
Mr. Clement met the Podlesak Brothers at the Great Northern
Hotel in Chicago?

A. I think that sale took place after that.

Q. At the time of the meeting in Chicago, was the ques-
tion of the sale of the Sumter Company to the Splitdorf Com-
pany in process of negotiation, or had it been made?

A. I am reasonably sure it had not been made. I do not
know whether it was in process of negotiation. I don't know
at what stage the proceedings were when that meeting in
Chicago that you refer to was held.

Q. You remember that meeting?

A. Yes, that took place August 20th, 1915.

Q. Had any negotiations for the sale of the Sumter as-
sets at Sumter, S. C., been made prior to that date?

A. I could not say.

Q. Is there any way you can refresh your memory?

A. Not unless I ask some of those who were engaged in
that matter at that time?

Q. Who would you ask?

A. I might ask the Splitdorf Company's Attorney. I am
not familiar with the details of that transaction as to dates,
because I had very little if any correspondence about that.

Q. You don't mean to say that there were, so far as you
know, no negotiations prior to August, 1915.

A. I think there were negotiations prior to that date. I
cannot say the exact stage they were in prior to that time.
430

Q. Then these negotiations were being had between
Sumter and Splitdorf people at the time of the meeting
in August, 1915, at Chicago, when you met the Podlesak
brothers?

A. I think so.

Q. You say, you think. You have a positive recollection
that that was the fact, have you not?

A. At the time, August 1915, and previous thereto, the
Sumter Company wished to dispose of its plant and was in

negotiation with parties with that end in view, and I think that the Splitdorf Company was one of these parties, but as to the exact stage to which the negotiations had reached, I am unable to state.

Q. You are entirely familiar with the process of manufacturing and with the goods that are manufactured at the present time and prior to this time, at the Sumter Works in Sumter, S. C. ever since you have been connected with the company?

A. I am.

Q. I show you a catalogue put out by the Sumter Electrical Company, and it bears the legend, "1915. Sumter Magnetos". It is marked "Exhibit 4", and I ask you whether that is some of the literature of your company and issued by your company?

A. Yes, sir.

Q. I call your attention to three places in this catalogue which I have just shown you and these three places are marked with the initials, F. H. S., being pages 16, and at page 37 that portion of the catalogue denominated "plug oscillator" and on page 38 to a cut called "Figure 1." Now, having directed your attention to these portions of the catalogue, please answer this question as to page 16: Are these the 431 type of oscillating magnetos, so called, now manufactured by you?

A. Yes, sir.

Q. And for how long a time has that type of oscillator as shown on that page been manufactured by you.

A. This general type has been manufactured, I think, since 1913.

Q. Is it called the Vandeventer type?

A. No, sir; and it is not a plug oscillator.

Q. At page 16?

A. Yes, sir.

Q. But it is an oscillating magneto?

A. Yes, sir.

Q. I now call your attention to page 37. The heading is "Plug oscillators", and figure 1 is what?

A. Figure 1 shows the typical outfit as described in the booklet.

Q. That is what you call a plug oscillator and what you call an oscillating magneto, in combination?

A. Yes sir, the combination consists of the magneto make-

and-break ignitor, in combination with the actuating mechanism therefor.

A. And that is what you supply at the present time to Fairbanks, Morse & Co. on their engines?

A. No sir.

Q. You are not supplying them to them?

A. No sir.

Q. What are you supplying?

A. A small rotary magneto, substantially as shown on page 4 of the booklet hereinbefore mentioned.

Q. Are you supplying them with a plug oscillator in connection with any other equipment of any kind; a so-called plug oscillator?

A. Not from these works, and I understood your former question to apply to what was furnished from these works.

Q. Then the device shown by figure 1 is supplied to Fairbanks, Morse & Co., but not from Sumter?

A. Yes sir.

432 Q. And it is assembled in Chicago and supplied by the Sumter Electrical Company of Illinois; is that what you mean?

A. No sir, the history of that device there, figure 1, as shown on page 38 of the booklet is this,—that the magneto proper is manufactured at Sumter and was shipped to Chicago, and the balance of the equipment making up the complete device was manufactured in Chicago, the magneto mounted thereon and the complete device shipped to the Fairbanks Morse Company.

Q. Then the plug oscillator part of the device was made in Chicago?

A. Has been up to the present time.

Q. On August 20th, 1915, when this meeting was had to which I have reference, were the facts as to the device shown at figure 1, the same then as you have described?

A. If we were making them at that time, yes. Perhaps I can save some time in this examination by stating that we have never shipped any of the devices known as the plug oscillator from Sumter to any customers, with the possible exception of perhaps twenty five or thirty machines.

Q. You mean the Sumter Works?

A. Yes sir.

Q. The facts, however, as to the supplying of this device to the trade, with reference to the assembling in Chicago, are as you have previously stated?

A. Yes; we located a man in Chicago who could undertake the manufacture of the device comprising the bracket and ignitor mechanism, and he made this under our authority and by our direction, in Chicago, our purpose being to save freight.

Q. Who do you mean by "our"?

A. The authority first of the Sumter Electrical Company, of South Carolina and after the dissolution of the Sumter Company by the authority of the Splitdorf Company.

Mr. H. D. Moise here interrupted.

The Notary interposes: At the request of Mr. Vandeventer the witness, and also Mr. H. D. Moise, as a matter of courtesy, I have permitted Mr. Moise to accompany the witness and to be present at the taking of the deposition, but admonish Mr. Moise that he cannot advise the witness while on the stand. I cannot permit it to be done.

Q. The Webster Electrical Company of Racine, Wis., brought suit against the Sumter Electrical Company, of South Carolina, in the Federal Court, claiming that the plug oscillator manufactured or put upon the market by the Sumter Electrical Company of South Carolina, or under its authority was an infringement upon the patents under which the Webster Electrical Company were manufacturing its goods, did it not.

Mr. Moise: I advise you that you find out what suit it was. There were several suits.

Mr. Wright: I object to counsel interposing any suggestions to the witness, or any suggestions whatsoever.

Notary: The objection is sustained, and I hold that Mr. Moise may warn the witness or advise him as to his rights, but beyond that he cannot go. It is merely a matter of courtesy that I allow him to come into Court as Mr. Vandeventer's friend and legal adviser, and the examination must proceed regularly.

A. Do you refer to the suit that was started in the Federal Court at Charleston, S. C.

Q. I do.

A. Then the answer is, Yes.

Q. Were you familiar with that suit?

A. Only in a general way.

434 Q. Did you ever read over the allegations of infringement therein contained?

A. I think I read the bill of complaint.

Q. You knew that it was a claim of infringement for the manufacture of this plug oscillator?

A. I did.

Q. Did you know it at the time that the suit was filed?

A. I knew it after I read the bill of complaint.

Q. How long after the bill was filed was it that you read the bill?

A. I got a copy of the bill some time afterwards, from the attorneys.

Q. Immediately afterwards?

A. I think within a couple of weeks.

Q. You knew that bill was filed prior to the meeting at the Great Northern Hotel that I have referred to?

A. I was in the North when the bill was filed and was advised by telegraph, that the bill was filed.

Q. Were you attending that meeting at the Great Northern Hotel when the bill was filed?

A. No sir.

Q. Then the bill was filed and you read the bill prior to the meeting at the Great Northern Hotel, which was August 20, 1915?

A. I can't say. I don't remember whether it was before or after that meeting.

Q. It was a matter of considerable importance to your company when the claim was made of infringement against it, wasn't it?

A. We are annoyed by matters of that sort.

Q. Are they matters of common occurrence in your business; people suing you for alleged infringement.

A. We have the usual amount of it, that a business of this nature is subject to.

435 Q. You consider that a common occurrence in a manufacturing business like yours, that people sue you for infringement?

A. I don't care to express an opinion.

Q. Then let us go back. It was of considerable importance to you when someone said you were infringing by the manufacturing of the plug oscillator, wasn't it?

A. It was important, if true.

Q. And you would know, and did know, within a week that such a claim was brought by the Webster people?

A. Yes sir.

Q. You read over the papers and informed yourself, didn't you?

A. I read over the papers at some time, but whether within one or two weeks, I do not know.

Q. Then you didn't consider it important enough to find out what was claimed by the manufacture of the plug oscillator by the Webster people.

A. We passed the matter over to our attorneys.

Q. You were not acting as attorney?

A. I am not a lawyer.

Q. You didn't read over the papers to decide whether there was an infringement when you did read them over?

A. You couldn't tell whether there was infringement. It would depend upon priority.

Q. You would find out what the claim was.

A. You could find out what the complaint alleged.

Q. That would be of considerable importance to you at the manufacturing end of the business with the Webster people claiming as to the infringement?

A. It depended on the facts, not what was stated in the Bill of Complaint.

Q. Then you didn't consider it of any importance to 436 know what was in the Bill.

A. I considered it of sufficient importance to read it.

Q. And read it within a few weeks after the Bill was filed?

A. Yes sir.

Q. You can't tell whether it was before August 20th, 1915 or not?

A. No sir.

Q. Why did you go to Chicago?

A. To meet Mr. Manning and confer with Mr. Podlesak, whom I had never met.

Q. Who told you to come there?

A. I think I made the appointment with Mr. Manning.

Q. Who is Mr. Manning?

A. President of the Sumter Electrical Company of Chicago.

Q. You mean organized under the laws of Illinois?

A. I think so.

Q. You know he is not acting as an officer of the defunct Sumter Electrical Company of Sumter?

A. No sir, there is no such company.

Q. What was his office in August, 1915?

A. Vice President of the Sumter Electrical Company of Sumter.

Q. Had the Sumter Electrical Company of Illinois been formed at that time?

A. No sir.

Q. What other office did he hold?

A. I don't know.

Q. Did he tell you to come to see him?

A. I don't know, without refering to the correspondence.

Q. Have you the correspondence?

A. I think I can find the letter.

Q. Will you produce it at the next hearing?

A. I will endeavor to do so.

Q. I would like whatever correspondence passed between you and your company at that time and Mr. Manning, 437 or any officer of your company which related to the purchase of the Podlesak interests, so called.

Mr. Moise: I advise you that you have a right to refuse to produce.

Mr. Vandeventer: I have no reason for refusing.

Mr. Wright: I object again to any statement by counsel as to the privilege or right of the witness except as to any matter which will incriminate him.

Objection sustained.

Q. Then you will produce at the next meeting?

A. Yes sir, I will make diligent search.

Q. What was the purpose of your visit on August 20th, 1915, to Chicago?

A. Speaking from memory, and subject to revision upon the production of the letters, Mr. Manning informed me in a general way that he had talked with Mr. Henry J. Podlesak and that Mr. Podlesak indicated his willingness to sell certain patents which he owned, and I believe that Mr. Manning asked me to come out there and look after the matter at once, with a view to acquiring these Podlesak patent rights, and also certain contracts for the payment of royalties under the same patents, which then existed between H. J. Podlesak and Emil Podlesak, his brother, and the Webster Electrical Company.

Q. And you understood when you went there that in that way you would be able under the Podlesak patent to manufacture the unitary plug and bracket in the same manner as the Webster Company?

A. We didn't consider it necessary to acquire them for that purpose, but because we thought they would be a good investment and because we thought that would be the cheap-

est way to eliminate the suits which it seemed to be the
438 purpose of the Webster Electric Company to institute.

We never made any devices resembling those manufactured by the Webster Company in which the Podlesak magneto is employed nor did we contemplate doing so at the time these patents were purchased. We were principally alarmed at the time this transaction was entered into by the fact that the Podlesaks were threatening to engage in the magneto business, and one of the objects in our buying the patents was to eliminate them as possible competitors. We wanted them out of the field, although we did not care to use their names, and afterwards entered into a stipulation to this effect.

Q. Then you did know that there was a suit pending when you went up there?

A. Yes sir, I had been informed by telegraph.

Q. When you were there?

A. No sir, when I was in the North, before I went to Chicago.

Q. So when you found there was a lawsuit pending in Charleston against your company, then you were telegraphed to and went and got hold of the Podlesaks in order to get rid of that litigation. Is that true?

A. I think you have misstated the transaction. The Podlesaks had something to buy. I was called on to go out there and look into it and see if we wanted it.

Q. You said the purchase of the Podlesak rights would put an end to litigation?

A. We thought it would.

Q. There was litigation on when you went to this meeting?

A. Undoubtedly.

Q. Then your memory is refreshed and you know that litigation was brought previous to your visit to the Podlesaks, and you went to them to buy your peace?

439 A. That is substantially correct.

Q. And bought of the Podlesaks so as to silence the litigation the Webster people had brought against you?

A. That was part of the reason.

Q. What other reason?

A. We wanted to keep the Podlesaks out of the magneto business.

Q. How long had the Podlesaks been engaged on their own account in the magneto business?

A. I don't know. All of the information concerning the Podlesaks, I received second hand, from Manning.

Q. Then he would know more about it than you?

A. About their engaging in that business?

Q. Yes.

A. Yes.

Q. And when he said he was anxious to keep them out of the business, you took it from him and were anxious?

A. Yes sir.

Q. You did not investigate on your own account, but left that entirely to Manning?

A. We consulted together.

Q. Whatever he said to you was all one way? Your judgment was confirmed? Answer the question.

Mr. Moise: You have the right to answer the question in your own way.

Mr. Wright: I object on the ground that this attorney does not represent any party in this case, but claims to represent the witness. I have no objection if he will appear in this case for any party, but he should not, I object, instruct the witness in any form.

Objection sustained.

Notary: Mr. Moise, I instruct you not to interfere, unless you think the witness is in danger of incriminating himself, and I will allow you in that case, to advise the witness.

440 Mr. Moise: My presence is for the purpose of advising the witness of his privileges as such, which are not limited to answers which might incriminate him. Such answers could not possibly arise in this case.

A. My judgment was not formed until after I had met Henry Podlesak in Chicago, who told me that he was about to engage in this magneto business.

Q. Then your judgment was formed entirely by what was told you by Mr. Manning and Mr. Podlesak. You, yourself made no investigation.

A. I made no investigation and solely relied upon what was told me by Mr. Manning and Mr. Podlesak.

Q. Then there were two reasons why you wanted to buy: You wanted to get rid of litigation, and you wanted to get rid of the Podlesaks; is that true?

A. This is true and also for the reason that we considered the purchase of the Podlesak patents a good business investment.

Q. Then there was one third reason the investment reason. You were willing to invest seventy thousand dollars to buy certain patent royalties. You thought it a good invest-

ment, that you would get your money back with good interest on it. That is the third reason, is it not?

A. We thought those patents a good investment from a business standpoint.

Q. That would be a fourth reason, wouldn't it?

A. I don't think so. We thought those patents would earn sufficient in royalties to pay on the investment. We considered that the magneto business was an increasing one, and we did not desire then and do not desire now to see the licensee do less business.

Q. You would prefer them to do a greater business, so you would get greater royalties. You had three reasons 441 to get rid of the litigation, to get the Podlesaks out of the business and third that you would make some money for the payment of royalties over and above what you had to pay then, to wit, seventy thousand dollars.

A. Yes, these are the main reasons.

Q. Are there any other reasons?

A. None that I can think of at the present time.

Q. Whatever rights the Podlesaks had, you bought?

A. That is what we understand.

Q. The result of the meeting in Chicago, between you and other gentlemen representing the Sumter and Splitdorf interests and the Podlesaks, was to take an option to buy whatever rights the Podlesaks had. Is that true?

A. Substantially so, except that I do not think the Splitdorfs had any representative there.

Q. Who was the option taken for?

A. Mr. F. C. Manning personally, for himself, and it was transferrable to whoever he saw fit.

Q. He had no intention of paying \$70,000 on that option?

A. I cannot speak for him.

Q. What did you intend to do?

A. To secure the option and consult with the Splitdorf interests and see what they wanted to do with it.

Q. And if they wanted to buy it they would have the right to take it up?

A. Yes sir.

Q. Neither you nor Manning intended to take it up, except for the Splitdorf people?

A. No sir, that is not true. It was my intention after due consultation to take it up in behalf of the Sumter Company, which was my company.

Q. It was in process of dissolution, was it not?

A. It was not dissolved at that time.

442 Q. What happened was that the Sumter people and the Splitdorfs jointly took up the option?

A. Yes sir.

Q. And the Splitdorfs took the option and hold it at the present time, taking up the option from Manning and Company?

A. That is right.

Q. You have always supposed and never had anyone say to the contrary, that whatever the Podlesaks had passed by the various stages I have spoken of to the Splitdorf Company. In other words, there is nothing the Podlesaks had that you did not get?

A. In relation to their patent rights and contracts with the Webster Company, yes sir.

Q. And if there was any right that the Podlesaks could enforce against the Webster Company under the contracts which passed under that option to the Splitdorf Company. The Splitdorf Company could enforce that as against the Webster Company?

A. That is my understanding.

Q. Did you know at the time that this option was taken, on August 20th, 1915, that Henry Podlesak claimed and had served notice of a default on these contracts, as against the Webster Company?

A. No sir, I don't believe I did.

Q. If he had declared a default under it, it was declared for the purpose of enforcing the royalties, wasn't it?

A. I don't know.

Q. It was not discussed between anybody?

A. I don't remember discussing it with him. I think he volunteered on some occasion the statement that he had had some trouble in collecting royalties from the Webster Company.

443 Q. Prior to the time he gave this option to Mr. Manning?

A. I think it was.

Q. At the meeting at the Great Northern Hotel?

A. I don't remember. It was a chance remark, brought about in connection with some remark of mine as to whether we would have any difficulty in collecting these royalties.

Q. And if you had any difficulty, you would have a right to declare a forfeit?

A. I think so. It was, I think, in the contracts.

Q. Did you understand you were buying the right to enforce the payment of your royalties?

A. Yes, or we would not have bought them.

Q. You would not have put seventy thousand dollars in this particular basket unless you knew you could enforce its payment?

A. No sir.

Q. That would be part of the investment?

A. Yes sir.

Q. And any counsel you had could investigate what rights you had to enforce the payment of the royalties?

A. The so-called contracts between Podlesak and Webster were investigated by our counsel, and after he passed on them, we bought them.

Q. You didn't investigate them?

A. Only in a general way.

Q. I want to know what you did.

Witness: Mr. Notary, I think I am privileged not to answer that question. It is a question between counsel and client. I was patent attorney for the Sumter Electric Company and think that I am privileged to reserve answering the above question.

Q. I will change the form of the question, so as to ask you whether you made any investigation as to the amount
444 of royalties that were being paid by the Webster Company to the Podlesaks under these contracts at that time.

A. Mr. Podlesak exhibited to us certain statements which purported to be correct statements of the amount of royalties which he had received, and we estimated what we thought would be the further business of the Webster Company, in this line, and our decision to purchase was based upon the result of that investigation.

Q. Then there were investigations as to whether the representations of Podlesak as to the amounts paid were true?

A. I think he exhibited checks or statements from the Webster Company which we took at their face value.

Q. Do you remember what they showed?

A. I do not.

Q. You accepted them without any further inquiry as to the amounts?

A. We had no way of ascertaining that these papers were not O. K. in every respect. We could not go to the Webster Company and ask them, because they would very properly refuse to give us the information under the circumstances.

Q. Why?

A. They were not particularly friendly, having sued us, and I gathered from other circumstances that they would not be inclined to look with favor on the transaction.

Q. They would not want you to buy these patents?

A. I should think not.

Q. Why?

A. I didn't think they were friendly towards us. They had sued us in Charleston.

Q. Which suit you were trying to quiet by buying these contracts?

A. Yes sir.

Q. And you didn't want the Webster people to know that you were trying to buy them.

445 A. We had no objection to their knowing that we were trying to buy these contracts, but we did not feel like going to them and asking them as a favor to show us their books.

Q. You felt that in order to substantiate these royalty payments, the only thing for you to do would be to go to their books and find out, and naturally they wouldn't want to do that. That is what you mean?

A. I don't think the question of substantiating the royalty payments was gone into very much at the time of the purchase. The Podlesaks told us while they had had difficulties in getting the royalties, they had always gotten them, and we had no reason to believe they would refuse to pay them to us, as we could not see that it made any difference to the Webster people whom they paid.

Q. And your attorney so advised you?

A. I don't know that this point was ever discussed with counsel.

Q. The statements the Podlesaks made fitted into your estimate and you were satisfied to take Podlesak's word for it?

A. Substantially so.

Q. And actually so?

A. That is what he did.

Q. You say Henry Podlesak told you he had had some difficulty about collecting?

A. I think so, but whether this conversation took place in August, 1915, or later I am unable to recollect.

Q. He didn't tell you he was then engaged in a contest with the Webster Company over the amount of the royalties?

A. No sir, not that I remember.

Q. And that there was a default declared by him because he claimed he had not received the royalties he was entitled to.

A. I don't remember.

446 Q. If there was such a default outstanding at that time you bought it, didn't you want whatever rights you had?

A. I don't know. I am not undertaking to construe those contracts.

Q. I am only trying to find out what you thought you bought there. I want to know whether if there was any default there you thought you bought it or not. You bought everything Podlesak had, didn't you?

A. Yes sir.

Q. If there was a default there, you thought you bought it.

A. I think that is a law question which I am not competent to answer.

Q. You got everything Podlesak had, and if there was anything you didn't know about, you got that, too, if it was anything they had?

A. The form of the question is to my mind an attempt to make me construe these contracts. We took a certain written conveyance from the Podlesaks, and I submit that that is the best evidence.

Q. Did you read over these contracts and know what they provided?

A. We did before the papers were signed.

Q. You were familiar with the contents of them?

A. At that time, we were.

Q. If these contracts provided for default, you were familiar with it at the time you paid your money?

A. Yes sir.

Q. And the right to declare that default as you understood it at the time?

A. I think so.

Q. Mr. Clements was the attorney representing the Sumter Company of South Carolina, at the time these meetings were held in the Great Northern Hotel, Chicago?

47 Q. Mr. Clements' status was that he went along with me as consultant, to advise me of certain matters in relation to these contracts and patents.

Q. He didn't advise you when you were negotiating?

A. He was present at those meetings and later on.

Q. What he advised you as between attorney and client as to these negotiations, wasn't advised in the presence of the Podlesaks, was it?

A. No, I think we consulted together privately.

Q. So there was nothing of a private nature passing between you and Mr. Clements in the relation of attorney and client, when anyone else was present.

A. We might have gone off in one corner of the room and consulted together.

Q. They could not have heard it? It was a matter that concerned you and your company, wasn't it?

A. Yes sir.

Q. But when you were negotiating with the Podlesaks there, these confidential things were not expressed in the presence of the Podlesaks?

A. No.

Q. You didn't say to Podlesak "there is a suit pending in South Carolina and we want to get rid of it?"

A. I don't remember. I might have mentioned it and probably did.

Q. There was no confidential relation that would prevent your saying it. There was no confidential relation existing as to it?

A. No sir. Podlesak knew all about it. He helped sign the Bill of Complaint.

Q. What did Podlesak say to you?

A. I don't think we touched on that sore subject at all.

Q. It was a sore subject?

448 A. A lawsuit is never a subject of joy to the victim.

Q. The noose is never a pleasant thing around the neck of the fellow that is going to jump? What did you say about the lawsuit to Podlesak? Was it discussed?

A. I don't think it was touched on at all, except perhaps in a casual way. We went to buy what he had to sell.

Q. But you had certain definite purposes; and one was to quiet this litigation. Didn't you tell him about it?

A. I don't think so. I think it was a self evident fact that if we bought the patents we could not be sued under them.

Q. Did he say so?

A. I don't remember.

Q. He had something to sell at \$70,000. Didn't you consider that a big price?

A. We considered it a fair price. We paid it.

Q. He was only getting \$8000 for his patents.

A. I don't remember what the royalties amounted to.

Q. As an officer of the company, you don't remember?

A. I knew then.

Q. You ought to remember and know now. You said it was a good investment.

A. We based our purchase more on what we thought the royalties would be from that time on than on any shipments made up to that time. We knew that the business of the licensee was increasing and would increase proportionately.

Q. Podlesak knew it?

A. Yes, and the high price was based on that.

Q. Not on quieting litigation?

A. Principally.

Q. You don't want to say what portion of \$70,000 was paid on any one of the things you were buying?

A. No, I do not wish to attempt to divide up the \$70,000.

Q. The result of this thing was that you did immediately get this suit dismissed?

449 A. Yes sir.

Q. You made a motion in the United States Court in Charleston, and based it upon the fact that you had acquired the Podlesak rights, didn't you?

A. We instructed our attorney to do whatever was necessary, and supplied him with a copy of the contract we made with the Podlesaks, and he did what was necessary. What illegal steps he took I do not know.

Q. The sore spot was waived. The suit was withdrawn?

A. I am informed that it was.

Q. You knew it.

A. Counsel notified us it had been dismissed.

Q. And the sore litigation was dismissed?

A. Yes sir.

Q. You have said that you wanted to get rid of the competition of the Podlesaks. You knew that about five months previous to this meeting Emil Podlesak had ceased to have any connection with the Webster Electric Company?

A. No sir, I don't know anything about that gentleman at all.

Q. Then you don't know that he was in the employ of the Webster Electrical Company up to a short time prior to this meeting in August, 1915?

A. I don't think that I did.

Q. Didn't know anything about him at all?

A. I might have heard it at some convention or gossip that goes around the trade, but I don't remember anything about the Podlesaks or their connection with the Webster Company until about the time of that transaction in Chicago, although I knew of Henry J. Podlesak as early as December 15th, 1913.

Q. Had they been manufacturing, or did they ever manufacture any devices which your company had manufactured or was then manufacturing?

A. Not that I know of. All we considered was that the Podlesaks knew a great deal about the magneto business, and from the information I could gather, they had supplied the Webster Company with their designs, and we looked upon them as being skilled men in that business.

Q. And you wanted to get away from any competition they might make, entering the field you were in.

A. We didn't care to see another manufacturer enter the business.

Q. They were just starting: They had never done anything?

A. I don't know.

Q. You would know whether there was any magneto manufactured by the Podlesaks on the market?

A. They had not manufactured at that time.

Q. You knew the Websters were manufacturing?

A. We did.

Q. And there was nothing the Podlesaks had put out up to that time?

A. Nothing I know of.

Q. So the competition you feared was what might arise thereafter?

A. Yes sir.

Q. That they might go into something that might compete with you, and that was one of the things you were buying?

A. Yes sir.

Q. When the Podlesaks came into this meeting, did he produce his contracts with the Webster Company for the examination of your counsel.

A. I think he handed them to Mr. Manning.

Q. So Mr. Manning had before him these contracts and knew their contents before the option was drawn up.

451 A. I think so.

Q. There was no question presented then as to whether the patents were good or not, or whether the con-

tracts were good or not. What you were buying was whatever they had there. You didn't undertake to investigate whether the patents were in litigation or not and whether there was any claim by the Websters in connection with the patents. All you took was what they had there?

A. I think that was all the law would give us.

Q. There was no discussion between you and the Podlesaks with reference to whether the patents were good or not?

Witness: Now, Mr. Notary, I think I am privileged. I went there in the capacity of attorney for my company.

Q. What then was the capacity of Mr. Clements?

A. Mr. Clements went there as my consultant; was employed by me personally for that purpose.

Q. He didn't represent your company?

A. Only by my direction and authority.

Q. Where did you meet Mr. Clements prior to this meeting of August 20, 1915?

A. You mean the first time? I think I met him in Washington and went to Chicago with him.

Q. He went at your personal representation?

A. Yes sir.

Q. And didn't represent the Sumter Company or the Splitdorfs?

A. No sir.

Q. You represented them?

A. Yes sir.

Q. You say you are not an attorney?

A. I am not an attorney at law; I am a patent attorney.

Q. My question was directed as to what was said between you and the Podlesaks as to whether their patents were good or not.

452 Witness: Now, Mr. Notary, I submit that is forcing me to pass an opinion as to these patents.

Q. I want to know what was said there between you and the Podlesaks as to whether their patents were good or not.

A. How can I answer that without expressing an opinion as to the patents? They represented them to be good and valid.

Q. You didn't make any particular investigation along that line, did you?

A. As to the validity and scope of those patents? Yes, we did.

Q. Then the question as to whether or not he had a right

to manufacture, use and sell the unitary plug bracket did come up?

A. Podlesak stated plainly that he had this right.

Q. To make, use and sell the unitary plug bracket?

A. Yes, and that this right was assignable, and it was on this representation that we bought what he had to sell.

Q. You didn't investigate the relations of Emil Podlesak one of the owners, with the Webster people, did you?

A. We did not.

Q. You didn't consider it necessary to in any way go back of these agreements on their face, to see what the Webster Company's claims would be in relation to them, did you?

A. We were advised by counsel that any prior verbal contract or contracts of any sort had been merged in the three written agreements.

Q. Then the question whether there was a verbal or other construction of the contract was up for discussion?

A. I don't think it was up for discussion at that time.

453 Q. It was before you took over the option?

A. I don't think it was up for discussion. I think it was mentioned in-so-far as Webster's attitude was concerned, whether or not they would make any attempt to break these contracts, and I think that was only discussed in a general way.

Q. Anyway the \$70,000 passed, or the contract to pay the \$70,000, of which \$25,000 was paid in cash, without your making any inquiry as to the Webster Company reference to any oral contract or other construction of the contracts than what appeared on its face.

A. We made no inquiry of the Webster Company.

Q. You didn't make any inquiry as to the relation of one of the joint owners to the Websters before you paid this?

A. We didn't in relation to Emil Podlesak.

Q. Or Henry?

A. I think we talked over his past relations with the Webster Company, but I don't remember the exact conversation. I didn't attach any importance to it at the time.

Q. Who did you talk it over with? Your attorney, Mr. Clements, or who?

A. With Mr. Manning, and I think Mr. Clements was present on one occasion.

Q. Anybody else?

A. Not that I recollect.

Q. You were willing to take the chance, whatever that chance was?

A. I don't know that we took any chance. We carefully investigated what we were getting, and it was satisfactory to us and we bought it.

Q. What did you do?

A. We interviewed Henry Podlesak and discussed 454 various matters and things set forth in the contracts and what the redress would be and then we entered into the contracts.

Q. That investigation was confined to that circle. You investigated and Mr. Henry Podlesak and his brother?

A. We saw no reason to go outside of that circle?

Q. And you didn't.

A. No sir.

Q. I think you said earlier in the examination that you bought whatever the Podlesaks had. Did you know that those two contracts required the use of the Podlesak name?

A. We did.

Q. Did you buy the right to use his name?

A. I don't know without reference to the contract, but I know that point was raised afterwards by the Websters, and we signed a stipulation or agreement covering that point, so there could be no possible interference with the Webster Company's business. We never used the name Podlesak in connection with our business in any way, shape or form and didn't want it, and so stipulated.

Q. You stipulated in the suit against you, the Sumter Electrical Company of South Carolina, the Splitdorfs and the Podlesaks by the Webster Company in the United States Court in Chicago?

A. I don't know whether it was so stipulated in connection with the suit or whether we did it of our own free will.

Q. Why would you stipulate with the Websters of your own free will that you would not use the Podlesak name?

A. To show the Webster Company that we have no desire to injure them in any way.

Q. Suppose I refresh your memory by saying that it was ordered by the Judge as to what you should or should not do?

A. I am willing to accept your statement, but I don't know whether it was in the order.

455 Q. You have stipulated that you would not use the Podlesak name, but not until the bringing of this suit, have you?

A. I don't remember that.

Q. You don't consider that a binding agreement with the Webster Company that you never will?

A. I don't know, but personally, I would be willing to have it binding. I don't think we would want to use the name.

Q. You wouldn't stipulate that you wouldn't make a plug oscillator. You think you have a right to make that?

A. Yes, I think we would have a right to make it.

Q. Did you know that in the contract between the Podlesaks and the Splitdorf and Sumter people there was a conveyance of good will by the Podlesaks to the Splitdorf and Sumter people?

A. There may have been. I don't recollect it.

Q. You were buying something there for which you were paying twenty five thousand dollars down,—at least your company and the Splitdorf Company were. Did you consider that you got any good will?

A. We paid the Podlesaks for the license and patent agreements and five thousand dollars additional for their good will, whatever it might be, for a period of years. As to the contents of those agreements and those contracts, it has been a very long time since I have read them. They were made in 1915, and almost two years has elapsed and if I am to be questioned, they should be produced.

Q. I wil refresh your memory with reference to those contracts before we finish the examination. You do remember now, before the contracts are shown you, that there was five thousand dollars paid to the Podlesaks to keep out of the business for a limited time.

456 A. I don't remember exactly what the five thousand dollars covered, but I think there was a separate payment of this amount, covering substantially what you state.

Q. That is to say the competitive features, what you say let you to enter into this transaction was placed as being worth five thousand dollars?

A. I don't know whether that was the worth of it or simply a nominal sum that was figured. That was the consideration named. Whether that was all the value, or whether that was part of the value and the balance was merged, I am not prepared to say.

Q. When your memory is refreshed to the extent that five

thousand dollars was the consideration expressed for the Podlesaks to keep out of business, or the competitive feature, you don't want to say how the other \$65,000 was apportioned as to royalties and the quieting of litigation?

A. I don't wish to attempt to make any disposition of the \$70,000 at all.

Q. I will call your attention to the contract between Emil Podlesak and Henry Joseph Podlesak, parties of the first part, and the Splitdorf Electric Company and Sumter Electrical Company of Sumter, parties of the second part, which is annexed to the bill filed in Chicago, to which I have already referred, and to that portion of the contract which I will now read to you:

457 "It is understood and agreed that the preparation and the prosecution of all applications for patents on inventions hereby conveyed or agreed to be conveyed, including both pending and new applications, original, divisional, re-issue and extension, shall be by the attorney or attorneys for the parties of the second part, on their designation, and the parties of the first part hereby appoint said attorneys as their attorneys for such purpose, and agree that they will at all times keep the parties of the second part or their said attorneys fully informed as to inventions they may make which might fall within the terms of this agreement, and that they will at all times aid and assist in the preparation and prosecution of said applications, and in any proceedings ancillary thereto, all, however, without expense to themselves for costs or attorneys' Fees, said expense to be borne entirely by the parties of the second part. The parties of the first part also agree that upon demand of the parties of the second part or said designated attorneys, they will execute assignments satisfactory to said attorneys of all said inventions and improvements not herein specifically designated but included within the scope hereof."

Do you remember that clause in the contract?

A. I do.

Q. And that was one of the things you expected to have the Podlesaks comply with, or it wouldn't have been there. Isn't that true?

A. Yes, sir.

Q. Do you recall that there was also in that contract a guaranty of title?

A. Yes sir.

Q. And whatever was necessary to be done by the Podle-

saks to make good what you were buying, you expected 458 them to do.

A. Yes, I recall that.

Q. Now, if it was necessary to examine the books of the Webster Company with respect to royalties, in order to see that you were getting all the royalties you were entitled to, you expected to do that too, didn't you?

A. I think we would have that right, under the contract.

Q. And would exercise it. There would be no question in your mind, as representing your company? You would exercise it if you thought it was to the interest of your company to do so?

A. It depends on the circumstances. If we believed the Webster Company made a return in good faith, we would have no desire to exercise that right arbitrarily, and would only do it as a last resort.

Q. If they defaulted in the payment of royalties, you would exercise the right to default their contracts to manufacture under the Podlesak licenses, wouldn't you?

A. I think we would.

Q. That of course would put an end to the payment of all royalties wouldn't it. Then you would have to go to work and manufacture yourself?

A. Not necessarily.

Q. What would you do? You wouldn't be getting your royalties?

A. No.

Q. Then you would have a right to make use and sell all the Podlesak devices.

A. I think we have that right anyway, under the contract.

Q. Not to manufacture the tripolar magneto?

A. We don't claim to have the right to manufacture anything covered by the patents enumerated in the so-called exclusive patents. There are two groups of patents. One 459 group of those patents is exclusive to the Webster Company, and the other group we consider that we have a right to manufacture.

Q. And in the group you consider you have a right to manufacture is the unitary plug and bracket?

A. You mean the device alleged to be covered by the Podlesak reissue patent.

Q. Yes.

A. Yes.

Q. You do claim the right to manufacture that?

A. Yes.

Q. Your plug oscillator has the Unitary plug and bracket construction, hasn't it?

A. Yes.

Q. And that is what the Webster Company claim was an infringement?

A. Yes.

Q. Now, going back to this question of default; you know that all the royalties are paid under the contract which you have just referred to as the exclusive right contract?

A. I don't know without examining the contracts.

Q. The second contract covers the second group and provides for the manufacturing, using and selling, under the so-called shop right license by the Webster Company in connection with the devices in the first group, as you have expressed it. Is that true?

A. After examining the contracts and exhibits C, D, and E, annexed to the bill which you have shown me, I find this is true.

Q. Then as you understand it, the default declared by the present holder of the rights under these contracts as against the Webster Company, would carry the right to manufacture, use and sell all of the Podlesak devices.

A. I am not prepared to express an opinion of that.
460 The legal force and effect of the first contract, the exclusive contract, I am not competent to pass upon.

Q. However, it is perfectly clear to you that declaration of a default, and the failure of the Webster Company to repair the default within the time specified in the contract would operate so that you would not receive any royalties.

A. If they failed to pay royalties, we would not get them.

Q. And you would then have the right of the Webster people in the Podlesak contracts, whatever they were?

A. I am not competent to pass upon the scope of the exclusive license as to whether if default be declared by the Webster Company we would have such a right.

Q. But that would be the case under the shop right license?

A. I don't think they would have any right under the shop right license if they defaulted and we took advantage of the default.

Q. The tripolar magneto is exclusively manufactured by the Webster Company, isn't it?

A. I believe so.

Q. Don't you know it.

A. There may be someone making it that I don't know anything about.

Q. You are pretty well posted as to the magneto business?

A. Yes, sir.

Q. If there was another low tension magneto in the market, you would know it?

A. I think our men would find it.

Q. You are manufacturing low tension magnetos?

A. Low and high.

461 Q. If another came into the market, you would know?

A. It is very probable.

Q. Wouldn't you know it?

A. A man on the Pacific coast might put out good magneto before I knew it?

Q. You haven't heard of any other tripolar magneto?

A. No sir.

Q. So far as you know, it is exclusively manufactured by the Webster Company?

A. Yes sir.

Q. Under the exclusive contract?

A. Yes sir.

Q. And for everything manufactured, your company gets a royalty?

A. I hope so.

Q. If you did not think so you would go to work to find out?

A. I have no authority to go in that direction.

Q. But you have rights to get royalties on everything manufactured.

A. The Splitdorf Company has rights.

Q. No one questions your right to these royalties? There is no question as to that?

A. I have never heard any raised.

Q. The Webster people don't deny that the mere payment of the royalties under that contract should be paid to you or your company, do they?

A. I have never heard of it.

Q. They are paying them?

A. So far as I know. Mr. Preble, our treasurer would have the certificate of the receipt of these royalty checks.

Q. You know about the litigation in Chicago, don't you, between the Websters, the Splitdorfs and Sumter Electric Company?

462 A. Yes sir.

Q. You have been there?

A. I have been up there, but never attended any of the hearings.

Q. Weren't you in Court at any time?

A. No, sir.

Q. But you were there at the time?

A. No sir, I don't think I was in Chicago on any day a hearing took place.

Q. But when it was pending?

A. Yes, sir.

Q. You have read the answer of the Splitdorf people?

A. Yes sir.

Q. You supplied the information?

A. Some of the information.

Q. Who prepared it, Mr. Clements?

A. Messrs. Gann & Peck, of Chicago, I think.

Q. Have you read a copy of it, the answer of the Splitdorf Sumter Company?

A. Yes sir.

Q. You were familiar with its contents? When it was filed or afterwards?

A. I think I read it after it was filed. I don't think I ever read the complete answer before it was filed.

Q. Is your understanding that the main issue involved is whether the Podlesaks had the right to convey the title to make use and sell the second group of devices you spoke of? Is that the question as you understand it?

A. I think that is one of the allegations in the bill. That bill is over 125 pages, and it is difficult for me to point out to which particular allegation the plaintiff attaches most importance.

Q. I want to know what your idea is as to the main issue in the case, as to whether or not it has anything to do with the right of the Podlesaks to convey the title to your company to make, use and sell the Unitary plug bracket.

463 A. If I am to judge by the room taken up by the various matters in the bill, it would seem that the conspiracy charge is the gravamen of the case.

Q. What do you understand the conspiracy charge to be?

A. I don't understand what the charge is.

Q. You picked that out as the most important allegation. I want to know what you understand it to be?

A. That the Splitdorf and Sumter Company had conspired with the Podlesaks to deprive them of rights that they have

with the Podlesaks, and to injure their business and hinder their progress.

Q. You take that to be the whole thing?

A. I take that to be the main thing, because they devote most space to it.

Q. Do you consider there was any question as to the right of the Podlesaks to convey the right to make, use and sell the unitary plug bracket?

A. Yes sir.

Q. If there was a default, you would have that right, without any question, a default on the part of the Webster people to pay the royalties.

A. That depends on the legality of the contracts and their force and effect.

Q. And that is what you understand to be the issue between you and the Webster Company in that suit, as to the force and legality of the contracts?

Q. One of them.

Q. What are the others?

A. The Bill is the best evidence.

Q. I want your impression.

A. I considered the allegation principally on the conspiracy charge; that these two companies and the Podlesaks have conspired to injure their business, and that the litigation has been brought about by that feeling.

464 Q. If you go into the same field which they occupy by their tripolar device it would decrease the amount of royalties which they pay you?

A. It probably would if we went into that field to the extent it would hurt their business, but the field is so large that the two companies would run to capacity without interfering with the other.

Q. You claim you have the right to manufacture the Unitary plug and pracket which the Webster Company is manufacturing.

A. That is being manufactured by companies other than the Webster.

Q. What Companies?

A. Accurate Manufacturing Company and Hercules Manufacturing Company.

Q. Don't you know those companies have been sued by the Webster Company because they are infringing upon the Podlesak patents.

A. I believe they were.

Q. Have you anyone else in mind than those you have spoken of, as manufacturing the Unitary plug and bracket?

A. No.

Q. If there was a default, it would put the Webster people out of the business of manufacturing the Unitary plug and bracket?

A. That would depend entirely on the attitude we would take, in case of default.

Q. That is, you might license them to continue manufacturing?

A. We might waive the default for a certain time, in order to allow the people they supply to continue their business. Owing to the conditions during the war we would be unable to take care of the Webster business.

465 Q. It would be under your control?

A. You mean they would continue existence at our pleasure?

Q. Yes sir.

A. Yes sir.

Q. That is what I understand. Now the United States Court of Chicago directed you to keep track of the Unitary plug and brackets manufactured or the plug oscillators. Are you doing that?

A. Yes sir.

Q. You are about to manufacture more of the plug oscillator, so-called, than before you bought the right from the Podlesaks?

A. Our business in that line is continually increasing, due to the natural increase of business in the gas engine field.

Q. And you are soliciting the trade for the plug oscillator now more than ever?

A. Only to a limited extent. We are unable to take care of much more business in that line than we now enjoy, our principal business being confined to other lines.

Q. But you are now entering the Webster field with your plug oscillator more than ever before?

A. I don't think the Webster company has any mortgage on the people we are doing business with, and I don't think we have ever supplanted the Webster line. The customers we are preparing to supply at the present time I don't think have used the Webster magneto, because I don't think in the opinion of their engineers it is suited to their engine equipment.

Q. You don't know who the customers of the Webster people are?

A. In a general way. Any man travels in the field sees the engines and sees the magnetos in it.

466 Q. So to some extent you have got the name of the Webster customers; but do you know the cost of the Webster device?

A. Not what it costs them.

Q. You know what your own costs are?

A. Yes, sir.

Q. And how those costs of material, labor and overhead compare with the like items of the Webster Company,—that you do not know.

A. We could only estimate what their labor and overhead is. We could estimate pretty accurately as to the material if it was necessary, but the machines we make do not remotely resemble the Webster magnetos.

Q. So you have got estimates at hand to compute the manufacturing cost of the devices manufactured by the Webster people.

Reference adjourned until ten o'clock May 25, 1917.

Examination of the witness, H. R. Vandeventer, resumed at ten o'clock, A. M. Friday, May 25th,—the counsel for the defendants only appearing.

Q. Did you produce the correspondence that I asked for at the last hearing?

I have made search of my files and find a letter from Mr. Manning, dated August 10th, 1915, a true copy of which I herewith produce.

(Letter marked for identification with the initials of stenographer, "E. M. D.")

The same is here incorporated in the record and return herewith, as follows:

"Copy.

To:

Sumter works

467

August 10, 1915.

H. R. V.

Subject: Patent Matters.

Dear Van:—

Although I am terribly rushed today trying to get things in shape to leave for Nebraska tonight, H. J. Podlesak dropped in and gave me a chance to find out what he knew about Webster's latest move. H. J. brought in his new oscillator to

show me. He had just come in from Champlain, Illinois, where they had been holding a tractor meet, and said one of the Webster agents had told him he understood there was a deal on between Webster and Sumter, and that Webster was going to take over Sumter, or vice versa. Someone had also told him that Williams, Brown, Mr. Webster, and a Mr. Becker, the latter a Chicago Banker, were all in New York where an important conference is being held, or was held last week with the Sumter interests.

I asked H. J. what he knew about the patent Webster Company is claiming as anti-dating the Dixie. He says it is the old Varley idea which has been modified to some extent by the original Webster Company's engineer, one Milton, the exploits of whom nearly wrecked the old Webster Manufacturing Co. This fellow, Milton, he says is the chap who got him (H. J. and his brother Emil) into the Webster organization because of Milton's infringement of the Podlesak Patents, the matter having been finally adjusted by Podlesak giving the Webster people a license, there royalties to be not less than \$5000.00 per year. This year it will run to \$12,000.00 he says.

It appears that Milton had some agreement with the original company (Webster) whereby if they sold out he was to be paid \$50,000. This was compromised to have the amount and that the present Webster Company had to pay off this \$25.00. H. J. claims that the old Company's experience, 468 with Milton's high tension machine costs them many thousand dollars and that if they have any idea of reviving this machine it will soon break the present company.

He says Lynn Williams evidently thinks some of the claims of this patent may read on the Dixie, but that he does not think Williams has a very broad idea of the previous history of machine of this Varley type. Podlesak is evidently very well informed as to the similarly constructed machines resembling the Dixie, and I believe it would be a good idea for you or Clement to have a talk with him, as he can tell you a great deal of the history of this Milton-Webster patent, his suggestions to Milton, etc. etc. He said he had just scrapped one of these old machines a few days ago. It appears that Milton went from the old Webster Company to the Remy people, where he did more experimenting with machines of the Varley principle. Soon after he married a woman of some means and for the past year or so has been living in Detroit where he has been developing some other devices, and

recently has written Emil Podlesak offering him a proposition to come with him and commercialize his new scheme. I neglected to ask Podlesak what the new scheme is.

I think I have scared H. J. pretty well out of the idea of manufacturing his own new machine, but from what I could get out of him today, it appears he has the right under his agreement with the Webster Company to manufacture any of the Podlesak outfits himself, or to sell his patents with this right to manufacture and sell without interference from the Webster Electrical Company. Brown would probably dispute this, but he says his contracts with the Webster Co. will

make clear his rights as stated in the premises. Now, if 469 Brown (the Webster people) gets too obstreperous, and if

the bad feeling between Brown and Podlesak continues to brew as at present, I think H. J. and Emil will be in the frame of mind to consider such negotiations with us as would let us right into the Webster business, and with their line and the plug oscillator, we sure would be in shape to command the field. I don't think Podlesak would expect anything like royalty he is collecting from the Webster Co., and besides this Brown is getting 5% on the gross sales, besides his salary.

It is pretty rough on me, with these matters coming up and without my knowing anything of what has been going on down in New York, beyond which you wrote me the other day, so I hope you will advise me fully in the premises. I certainly wish you and Mr. Clement would get out here together, as I believe we could have a very interesting "round" with the Podlesaks.

Hope you can get some sense out of of the above, all of which I have run off in a hurry and on an empty stomach too, as I haven't had time to get to lunch today.

Hastily,

(Signed) F. C. M."

F. C. M. KW. #40."

Q. Is this the only correspondence that you have relating to this subject?

A. That is the only correspondence I can find that relates to the Podlesaks and those contracts and patents.

Q. Have you a copy of the answer which was sent to this letter.

A. No, I have not, and it don't appear that there ever was an answer sent, because I went out there immediately after

that time. I was in Chicago within a week or ten days 470 after that. In fact I was there on August 20th, 1915, and this matter was verbally discussed and settled.

Q. But you have said in this examination that you were in the North and were told to go to Chicago and take up this matter with the Podlesaks. Is this because this letter was received in your absence and word sent to you?

A. I think so. I do not think I was in Sumter when this letter got there. Whether I came there between the 10th and 20th of August, I do not know.

Q. What would be the custom at your—office with reference to a letter of this kind? Would a wire be followed by a copy of this letter to you?

A. If I were going to remain very long it would, but I don't generally stay very long. They would probably wire me the substance of the letter.

Q. And then when you got to Chicago, you would see Mr. Manning and whatever was in this letter would be discussed with you then?

A. Yes sir.

Q. Calling your attention to the sentence in this letter: "Now, if Brown (the Webster people) gets too obstreperous and if the bad feeling between Brown and Podlesak continues to brew as at present, I think H. J. and Emil will be in the frame of mind to consider such negotiations with us as would let us right into the Webster business, and with their line and the plug oscillator, we sure would be in shape to command the field." Was that discussed between Manning and yourself?

A. I don't think so. My understanding of his language is that he refers to the threats that I understood had been made by Mr. Brown in connection with the litigation he was going to start. The Webster Company had told certain customers that they had the exclusive right to make these 471 plug oscillating magnetos, and were, as it were threatening these people, and I think that is what Mr. Manning has reference to.

Q. What people were they threatening?

A. The trade generally.

Q. Anyone that made the plug oscillators?

A. Anyone that made the plug oscillators.

Q. Anyone else?

A. Yes, or rather, that used the plug oscillators. I don't think they were threatening us at that time. There was some

correspondence that passed between us at one time. I am quite sure it was prior to that letter.

Q. At that time the suit down in Charleston claiming infringement against you had been brought?

A. I think so. I think Mr. Manning refers to that in the first paragraph of the letter as "Webster's latest move". I think that remark refers to the Charleston suit.

Q. But please notice, Mr. Vandeventer that the paragraph I have quoted to you refers to bad feeling between Brown and Podlesak. What was the bad feeling between Brown and Podlesak?

A. I am unable to state. I have never met that gentleman at that time, and did not know anything about it. It might be something about which Mr. Manning had knowledge.

Q. When you did go to Chicago and meet these two gentlemen, the Podlesaks there, was some language indulged in by the Podlesaks that was not complimentary to the Webster Electric Company and Brown.

A. I don't remember hearing anything you would term derogatory. I don't think they were particularly friendly. I went there for a specific purpose and not knowing the ins and outs of the matter; didn't press this matter. They were there with their papers and contracts to do business, and as there was no need for me to work up the situation, I confined myself strictly to the business end of it.

Q. The situation had been worked up before you got there?

A. I don't know.

Q. You said there was no need for you to work up anything. They were there ready to talk.

A. They were.

Q. Whatever preparatory work was necessary had been done before the meeting by Mr. Manning?

A. I can't say what he did.

Q. Didn't you talk with him about the feeling between Brown and the Podlesaks?

A. I don't think I talked with him as much as he has written in that letter.

Q. You knew there was an atmosphere of hostility between the Podlesaks and Webster.

A. I had an idea from that letter that for reasons I knew nothing about the Podlesaks were ready to sell their contracts. As to the nature and extent of those reasons, I was not informed at that time and am not to this day.

Q. Afterwards, in 1916, you went into a meeting at Mr. Becker's office, at which were present Chicago Counsel representing you, Mr. Manning, Mr. Becker and Mr. Brown?

A. I remember such a meeting, yes sir.

Q. Have I stated all who were present?

A. I think that is correct.

Q. Who was the counsel representing you?

Q. I think it was Gann and Peaks, representing the Splitdorf people.

473 Q. Both?

A. I think Mr. Peaks.

Q. Did you make the suggestion at that meeting that the Sumter Electric Company of Chicago should act as sales agent for the Webster company and that the Webster company should continue in the manufacturing end of the business?

A. There was a great deal of general conversation at that meeting, which, so far as I was concerned, was for the purpose of promoting peace and good feeling between the respective companies, and I threw out a number of suggestions as to how that feeling could be started, and among others I might possibly have suggested that Mr. Manning and Mr. Brown get together and try to settle their differences in regard to the sales. I thought if they did, both factories could be run to capacity and thereby everybody would be suited.

Q. Did Mr. Manning comment upon whether or not the Sumter Company, of Illinois would like to take over the sales of the Websters?

A. I think that he and Mr. Brown agreed to have a conference and some time after one called the other up with that in view, but for some reason or other no negotiations were made. I can't speak as to what Mr. Manning's Company would be willing to do.

Q. What did Mr. Manning say as to taking over the sales?

A. You mean at that meeting?

Q. Yes.

A. I don't think they thought my suggestion a very practical one. I think Mr. Manning in open meeting raised two or three objections that it wasn't a workable thing.

Q. You thought it was workable, because you suggested it.

A. I threw it out with the idea of starting something. My idea all along has been to settle it amicably and preserve
474 the interests of both corporations. I have nothing to do with the sales of the Chicago Company, and merely put

out that suggestion for Mr. Brown on the one side and Mr. Manning on the other to take it up and work out something.

Q. Mr. Manning has charge of the sales and would know more about it than you?

A. Yes sir.

Q. And he objected to your suggestion?

A. I think he said he didn't see how it could be done, but he didn't oppose it strenuously, because he agreed to talk with Mr. Brown and afterwards he told me he had called up Mr. Brown, or Mr. Brown had called him, and made an appointment, but I don't think they ever had the conference.

Q. That is tried to make an appointment?

A. Yes, sir.

Q. Was anything said by Mr. Brown at that meeting that in view of the action of the Sumter and Splitdorf companies in dealing with the Podlesaks in respect to these patents, he believed that it would be disastrous for the Splitdorf or Sumter people to come in contact with the Webster trade, and did you, in connection with that imputation, or anyone else, make the remark or a remark to the effect that very likely the Podlesaks had represented you people as being dishonorable, and that very likely the Podlesaks may have represented that the Webster people as being dishonorable.

A. I don't remember any such remarks. There were several talking at once in the room, and it might have been made in the room without my hearing it.

Q. I wanted to refresh your memory with that long statement. Now, I will ask whether you or anybody on your side didn't say that it was likely, in view of the fact that
475 the Podlesaks had represented the Webster people as dishonorable to you, he might have represented you as dishonorable to the Webster people.

A. Not that I remember.

Q. Or instead of using the word, dishonorable, some expression derogatory to the Webster people to you by the Podlesaks.

A. I don't remember that the Podlesaks were discussed at that meeting at all.

Q. You people were holding that meeting there for the purpose you have stated, and there was some considerable bad feeling between Mr. Brown and the Webster people and your Company, the Splitdorfs and Sumter and yourself and Mr. Manning, wasn't there?

A. That bad feeling has largely been on one side. We

have been attacked in this matter, and, personally, I had no bad feeling towards Mr. Brown and the Webster Company. I never knew Mr. Brown. I think the first I ever knew of Mr. Brown was in connection with a letter written December 12th, 1912, when, I believe, he was with the Hercules Company or the Elkhart Company, and that letter was written by Mr. Brown, in connection with a letter I had written him about an alleged infringement of one of our patents, No. 1031016, and I never heard anything about Mr. Brown after that time, until I had occasion to writ a letter to the Webster Company about October 27th, 1913, in which I notified him about the infringement of one of our patents, No. 1030243, and I wrote him just as nice a letter as I knew how to write, and I got a very nice letter in reply in reply from Mr. T. K. Webster, dated November 3rd, 1913, in which he said he had referred the matter to Mr. Williams, his attorney, and in which he

476 agreed with me that we did not want any patent suits, but did want our patents respected and would like to get together on some kind of understanding about the patent situation, and we got a letter from Mr. Williams saying they had made a change in their advice and while they didn't admit an infringement, they had made this change so that we could say that our patent had been respected. There was nothing in our correspondence with Mr. Brown that would cause me to take offense at him or he at me. I would like to put this letter on the record as tending to show the friendly condition then existing between the Sumter Company and the President of the Webster Company.

Q. I have no objection to your putting this letter into the record, subject, however, to my objection to its competency and relevancy.

(Copy of letter follows on following page.)

477

Sumter, S. C. May 29, 1917.

Mr. M. Reynolds,
Sumter, S. C.

Dear Sir:

Referring to the testimony taken in re Podlesak v. Webster Electric Company, before you as Notary Public on May 24th and 25th, I would say that I have read over and signed this testimony, and find the following corrections should be made:

Page 3, line 2, cancel "Ridgeway", insert "Ridgewood".

Page 4, line 2, correct spelling of the word "physical".

Page 6, line 7, correct spelling of "Van Deventer."

Same page, line 18, after "neto" insert "and a".

Page 7, line 6, substitute "is for" "was. Line 8 substitute "is" for "was".

Page 10, line 24, after "tell" insert "from reading the papers".

Same page, line 31, insert capital A at head of line, this being an answer.

Page 11, line 25, the answer should be "I don't know".

Page 12, the last answer on the page should have a capital A. in front of it.

Page 19, tenth line from bottom, correct spelling of the word "want".

Page 23, line 16, after "\$8000" insert the word "royalty".

Same page, line 23, the word "shipments" should be "statements".

Page 28, eighth line from bottom, correct spelling of "anybody".

Page 29, line 2, the word "redress," should be "results".

Page 33, last line, the word "patents" first occurrence, should be "license".

478 Page 23, line 2, correct spelling of the word "group".

Page 35, line 13, word "declared" should be "made".

Page 23, fourth line from bottom, words "the certificate of" should be "to certify to".

Page 37, seventh line from bottom cancel "to", second occurrence.

Page 39, second line from bottom after "owing" insert "to".

Page 40, line 17, correct spelling of "extent".

Last line, same page, "Magnetos in" should read "magneto on".

Page 56, first line, correct spelling of the word "defaulted".

Page 60, next to last line, "probably" should be "probable".

Page 67, line 12, "Licensee" should be "licensor".

Page 70, line 13, "issue" should be "issued. Line 25, "pre-issue" should be "reissue".

None of the above errors are material, but I am handing you four copies of this letter and would ask that you kindly mail one copy to each one of the parties who have received copies of the testimony.

Yours truly,

(Signed) H. R. VANDEVENTER.

Racine, Wis.
Nov. 3, 1913.
Letter #16.

Mr. H. R. Van Deventer,
Sumter, South Caroline,

•Dear Sir.—

Supplementing the letter of our Mr. Leeb dated October 30th, we are pleased to advise you that we presented your letter of the 27th, to our general consul, Mr. Williams of Brown, Williams, Bell, Hanson & Boettcher of Chicago, Illinois.

We are glad to learn through Mr. Williams that he had a very pleasant acquaintance with your people.

We thank you for the courteous tone of your letter and realize that it is always best to settle matters of this sort, amicably if possible. Mr. Williams is going into the matter carefully, and we hope to write you again very shortly in reference to this matter. It surely is not our intention to infringe any of your legal rights.

Yours very truly,

THE WEBSTER ELECTRIC CO.,

By (Signed) T. K. WEBSTER
President.

TKW:DP

480 A. I never met Mr. Brown personally, except at the Detroit gas engine convention, and was then introduced to him for the first time,—I think in 1914.

Q. Your answer doesn't cover the scope of my question. What I wanted to know was this: If at that meeting at Mr. Becker's office in Chicago, anything was said by anybody in reference to the fact that the Podlesaks had made any attack against the Webster Company or others, or not.

A. I don't remember hearing any conversation of this character.

Q. Did you know, as a matter of fact, from any representations made to you by Mr. Manning, or anybody representing your interests, that the Podlesaks were hostile to the Webster people and had made any threats or remarks derogatory against the Webster Company?

A. You mean outside of this meeting, at any time?

Q. Yes, sir.

A. I have gathered the impression from casual conversations from time to time, with the various people interested in

this matter, that the Podlesaks and the Webster people were not friendly, but I never heard the Podlesaks say that they were going to do anything to the Webster Company.

Q. I understood you yesterday to say that you were putting out more plug oscillators now than ever before?

A. We are beginning to put them out. We have not yet.

Q. If you are going into the plug oscillator field, it must be either that you think your plug oscillator is better or is cheaper, or can be supplied to the market cheaper than the Webster product.

481 A. We don't think it can be sold cheaper. We don't think it is sold as cheap as the Webster device, but it is better suited to a certain type of engine, for which the Webster device is not considered by the manufacturers of those engines to be suitable.

Q. Then you don't mean to say, as a matter of fact that it is better, but that it suits some people better.

A. It is better for the purpose for which it is intended. It is not intended to be used on the same type of engines as the Webster device.

Q. There is a market for it, and you are supplying that market at the present time?

A. Yes sir.

Q. I think you said that the plug oscillator did include the unitary plug and bracket idea?

A. Yes, that has been included in a number of devices shown in the prior art.

Q. And is included in your plug oscillator?

A. Undoubtedly.

Q. You have not learned yet how to make these plug oscillators cheaper than the Webster people make their plug oscillators.

A. Why, it is not the same device and there is no way to compare it in cost with the Webster machine, except as a whole. It is like trying to compare a Ford automobile with a Dodge. We have learned how to make it at a low cost, but I do not believe it is as cheap to manufacture as the Webster.

Q. You are in the employ of the Splitdorfs, I think you testified, at the present time?

A. Yes sir.

Q. And of course, whatever rights they got or claim to have gotten and claim the ownership of now, under the
482 agreement which took up that option, you would not hesi-

tate to advise to have exercised, if it was for the advantage in any way of the Splitdorf Company, would you?

A. Whatever I considered to their advantage, I would advise them to do if called upon for this advice, but I might say that I am not qualified to speak for the Splitdorfs, for I am neither an officer nor director of that concern, and nothing to which I might testify would be considered binding on them.

Q. My question was really directed towards your attitude as a practical man and employee of the Splitdorfs, running the Sumter Works of the Company and knowing the demands of the market and the general character of the products of the company, and in view of this statement by me, you would advise your company to take advantage of every right in these Podlesak agreements that the agreement had, to carry out its business to the best advantage, wouldn't you?

A. That would depend largely on the circumstances. I think the Splitdorf Company has rights in these contracts which can be enforced, such for instance as in case of a default by the Webster Company they could notify the Webster Company to cease manufacturing the devices covered by the patents, but I don't think under the present conditions of the trade, I would advise a drastic action of this kind, or that the Splitdorf Company would seek to enforce such a drastic measure.

Q. That is not within the scope of my question, but if it was necessary to enforce the right to default for the benefit of the Splitdorf business, as you see it, you would so advise, would you not?

A. Only in the event that the Webster Company was not able to take care of the trade, or became bankrupt, or something else happened to it of that nature. I don't think
483 if they got in hard luck and defaulted on account of temporary lack of money, I would advise the Splitdorfs to forthwith close down on them. I would advise this course only as a last resort, in the event that they could not take care of the gas engine trade, and in the event that they were to become bankrupt, through mismanagement or something of that sort.

Q. But you would feel that you were the judge of the circumstances which justify a default. You would not leave that to the Webster Company, would you?

A. I would take the statement of Mr. T. K. Webster or of Mr. Brown as to the affairs of that company.

Q. But as to the interference with your trade, if the Webster people tried to interfere with your putting out the plug oscillator, as you are doing and preparing to do, how then?

A. I do not think we would attempt to enforce anything under default of that reason.

Q. At the present moment you are perfectly satisfied if you can go on with your plug oscillator manufacturing and placing on the market; that would satisfy you?

A. Yes, together with the Webster Company continuing its business in an ever increasing and uninterrupted manner. We would like to see them do as much business as possible and pay as large royalties as possible.

Q. All this, you have stated above is directed as to the policy, which may be generous or not. I am not directing my question towards that feature of your business. What I wanted to know was whether you would hesitate to exercise any right which you have under these contracts, if it was for the advantage in any way of the Splitdorf Company.

484 A. Speaking personally, I would hesitate personally and give the matter very serious consideration before attempting to enforce the letter of these contracts to injure the Webster Company in any way. I would have to inform myself very fully as to conditions existing at that time in the trade and between the two companies.

Q. But if it was really for the advantage of the Splitdorf Company, after you had made such an examination, then you would exercise any right against the Webster Company?

A. If it were a clear-cut issue as to whether I would favor the Webster Company or the Splitdorf Company, I would naturally favor the Splitdorf Company.

Q. I am not asking you as to a question of favor, but a question of right; you would exercise that right?

A. I would advise that such a right be exercised.

Q. But what you want now, as I understand your previous answers, is to push so far as you can, the market for the plug oscillators: That is our present object, and not to declare a default against the Webster Company?

A. Our present policy, I believe is take in such business in the plug oscillator line as we are able to handle.

Q. And to that end, solicit the trade, so far as it will bring you the business you desire?

A. I think, or rather, I am informed that the trade is soliciting us. I think it is the other way about. We have had quite a number of people come to us who wanted this

device, and I don't think that the sales organization is making any very great effort to sell this thing. They are selling only where they are obliged to sell it.

Q. And you are selling in increasing numbers?

A. Getting ready to sell in increasing numbers.

Q. In response to this demand you have referred to?

485 A. Yes, sir.

Q. This preparation consists in methods of manufacturing, to the advantage of the company?

A. We have bought no new machinery. We have gotten new tools and gotten ready to manufacture this device.

Q. And the policy of any manufacturing plant is to produce as economically as possible to hold your customers who desire this particular device?

A. Yes sir.

Q. Now this meeting at the hotel in Chicago, on August 20th, 1915, extended over some considerable time, didn't it? Two or three hours?

A. I think so.

Q. And during those two or three hours you and Mr. Manning and Mr. Clements and the two Podlesaks talked over these contracts which the Podlesaks had brought in for you to consider, did you not?

A. Yes, but I don't think that both the Podlesaks were. If my recollection is correct, there was only one of them there, Mr. H. J. Podlesak.

Q. How long did you talk with him.

A. I think two or three hours.

Q. On one day only, or was there another meeting another day?

A. I think we only talked one day, but I am not sure about that.

Q. And only with Henry?

A. Yes, I think so. I don't remember that Emil was present.

Q. I think you said you were familiar with all the patent litigation that concerns your company, because you are a patent attorney, is that so?

A. Yes sir.

486 Q. And you produced a certain letter and asked to have it read into the record here, from T. K. Webster, which letter ante-dated by some years this purchase of the Podlesaks' rights. Is that true?

A. Yes sir.

Q. There is another letter that Mr. Webster wrote to which reference is made in the answer of the Splittdorfs and Sumter Company to the Chicago suit, which is put in as an exhibit to that answer. Do you remember that letter?

A. I think the letter you refer to is dated January 2nd, 1914, signed by T. K. Webster and addressed to me at Sumter.

Q. You remember receiving that letter at the time of its date?

A. Yes sir, I acknowledged receipt of that letter under date of January 15th, 1914.

Q. Referring again to the pleadings in the case for infringement brought in Charleston in the United States Court, had you read them over, and was it fresh in your mind at the time you went into that meeting on August 20th, 1915, or had you read it over at that time?

A. I don't remember, I don't think I had read those papers at all, because I don't think I had been back to Sumter and gotten copies of them.

Q. You knew the suit was pending, but had not familiarized yourself with the details.

A. Yes, I had received advice by wire that such a suit was pending.

Q. You have no complaint to make of the Podlesaks at the present time that they are not doing everything they should do to make good on that title?

A. No sir, we have no complaint to make. We never asked them to do anything. After the contracts were made, we were through with them.

Q. You don't mean you would dismiss them from any obligation they are under to make good?

A. I don't know what obligations they are under, except that they agreed to do certain things in connection with the patents they assigned, and aside from that obligation, I don't know of any obligation they are under to us.

Q. They had to stand by that title they sold you in any respect you wanted them to?

A. They guaranteed they had a right to sell when they sold.

Q. You have not paid them the last \$20,000 of that consideration, have you?

A. I don't know. That don't come under my jurisdiction.

Q. Then the attorneys would be the ones to tell the Podlesaks to make good or they wouldn't get that \$20,000?

A. I don't think the attorneys would do anything unless the company instructed them to do it.

Q. You have stated in a general way everything that you could recall as to what took place at the meeting when Henry Podlesak was present on August 20th, 1915. Have you any reason, since this examination has proceeded, from any refreshment of your memory due to this examination, to add any particulars as to any matters discussed, or then discussed?

A. No, sir, except that the most of the conversation at that meeting related to the patents, and our conversation with Mr. Podlesak principally turned on the technical questions involved in connection with these patents, and then we talked about the price he wanted and the probably income that we would receive, and the question of title was gone into and 488 he exhibited certain papers which showed that any prior contracts he might have made were merged in the three written contracts he wanted to dispose of.

Q. You took them at their face value?

A. We investigated all he showed us that passed between him and the Webster Company previous to that contract.

A. I think you said such investigation as you were making then and there in your discussion of the subject.

A. Yes, he exhibited other papers that he had, and we took them at their face value.

Q. Those were statements of the Webster Company as to payments of royalties?

A. I think he exhibited prior contracts, he had had or his brother had had, and some letters between him and the Webster Company.

Q. Were those contracts with the Webster Company and Emil Podlesak?

A. I don't know.

Q. I asked you yesterday and you said you didn't consider any contracts that Emil had with Webster; that you didn't consider it necessary to consider them. Now, do you wish to say that you did consider them?

A. No, I am trying to give you all the information I possess with reference to those Podlesaks, and they exhibited certain papers, or rather, Mr. Henry Podlesak did; I don't remember that Emil Podlesak was present; and we talked over those papers and discussed the bearing they had on the

contracts, and then we discussed it among ourselves, and we decided the prior agreements had been merged in the contracts, and we bought them. As to what those papers were, I don't recollect at this time. That has been two years ago and I have been very busy since then.

Q. Was anything said about the Charleston suit that 489 was pending?

A. I don't remember that that was mentioned, except perhaps in a casual way. I know that Podlesak knew about it, because he signed the Bill of Complaint.

Q. But you didn't know particularly about it. You hadn't examined it then.

A. No sir, I don't think that I knew what patent they were suing on.

Q. Was anything said about that letter you have referred to, dated January 2nd, 1914.

A. No, sir, I don't recall anything being said about that at all.

Q. At any time on August 20th, 1914?

A. No sir, I don't remember hearing anything said about it.

Q. I suppose you have no hesitancy in saying that what you were really after when you went up there, when you negotiated this purchase from the Podlesaks was whatever affected the unitary plug and bracket, so far as the question of infringement by your company in its manufacture of the plug oscillator, so called, was concerned?

A. No, I think we were more interested in finding the best way to quiet litigation of all kinds between the two companies.

Q. The only litigation was over this unitary plug and bracket between you?

A. That is all they had started at that time. We didn't know but what they might start something later on.

Q. Did you have a guilty conscience?

A. No, because we were not making anything. It was hard to tell what they might do.

Q. You wanted to put it out of their power to attack you in the future, whatever you did.

490 A. We wanted to protect ourselves in a perfectly legitimate way.

Q. Of course, and the present protection was protection from the plug oscillator litigation and anything else that might develop; is that true?

A. That was the reason, so far as that goes.

Q. That is what you were after?

A. There were other considerations.

Q. But you were after that?

A. That was the immediate pressing necessity at that time.

Q. Do you refer to anything else as other reasons, besides what you have already mentioned in this examination?

A. No, I think they were all mentioned yesterday.

Q. I want to call your attention particularly to an Exhibit C, which you examined yesterday, and to a certain clause thereof, which I will now read.

491 "Sixth: The party of the second part agrees that it will on the day of each and every report pay to the parties of the first part, jointly, as a royalty or license fee, five per cent (5%) of all moneys or the equivalent thereof, which they may have received, or that may be due them from the sales of or in exchange for the said devices sold and delivered during the preceding quarter. It is further expressly understood and agreed that the said devices manufactured embodying above improvements, or any of them, are not to be sold for less than a fair and reasonable price, based upon manufacturing and trade conditions."

Q. The question is: Do you remember that there was any discussing at that meeting with Podlesak on August 20th, 1915, with reference to this section which I have just read you?

A. No sir, I don't remember any.

Q. I wish also to call your attention to Exhibit D which you examined yesterday and will read to you therefrom the following:

"And the parties of the first part" (and referring back to the beginning of the agreement, the parties of the first part are Emil Podlesak and Henry Podlesak) "agree that they have good right and lawful authority to grant said shop right and license, and that they have not heretofore parted with any right license or privilege inconsistent therewith, and that they will not, while this shop license to the party of the second part is in force, give or grant shop licenses to others to make, use, or sell herein said inventions."

Now, having called your attention to this, the question is whether the contradictory nature of that language was discussed in this respect,—that first it purports to say that they

will not grant a license to other parties, and in the same
492 sentence with the words "expressly reserving however
the right to themselves to make, use and sell the herein
said intentions". Was the contradictory nature of this part
discussed?

A. I remember discussing that matter. We don't agree
with you that the language is contradictory.

Q. I don't mean to commit you to that. I want to know
what was said.

A. I think the purpose was to grant a right to the Webster
Company but reserve the right to the Podlesaks, assignable
by them, so that really any two people, or two concerns, or
two groups of people could make use of that invention; the
Webster Company, on the one hand, and the Podlesaks on
the other. The Podlesaks were entitled to call in all the labor
and capital in the world and go to work on those inventions.

Q. That was the conclusion you reached?

A. Yes sir.

Q. Calling your attention to the same contract, Exhibit D,
I will read to you the second paragraph;

493 "Second: The parties of the first part" (and the par-
ties of the first part are the Podlesaks and the second
part the Webster Electric Company) "agree to and with the
party of the second part that they, and each of them will aid
and assist each other in the prosecution of said applications
and the obtaining of patents thereon and in any interference
proceeding relating to their right or priority to said inven-
tions, and in any suit or proceeding brought under any of the
said patents or for the infringement of any patents by reason
of the manufacture, use or sale, by the party of the second
part of the inventions described in said patents or applica-
tions; provided, however, that said parties of the first part
shall not be called upon to pay out or expend any money in
any suit or proceeding relating to the said inventions, and the
parties of the first part hereby appoint the attorney for the
party of the second part as their agent and attorney for the
purpose of joining them as parties complainant where neces-
sary or desirable, in any suit which the party of the second
part may wish to bring on account of the infringement of
any of said Letters Patent."

Q. Was that particular language discussed at that meet-
ing with the Podlesaks on August 20th, 1915.

A. It was, and we understand that this was very properly
put into the contract, because the licensee could not handle

any of the matters in the patent office in connection with these patents. It was necessary under the law, for him to have the co-operation of the patentee and it was necessary, under the law, for the patentee to join the licensee in any suits for infringement. He was forced to do so.

Q. And if it was necessary to use the Podlesaks for that purpose you would have a right to do so when you bought that contract?

494 A. I don't think we could use the Podlesaks in that connection, because what we bought was the absolute title to the patents, and having once acquired this, we were free from the Podlesaks so far as being required by law to have them join us. The assignee of the whole title could sue, but a mere licensee could not do so.

Q. And when you got the suit in Charleston dismissed, that was the way you did it, by using the Podlesaks on the other side from the Webster Company?

A. We merely withdrew from the licensee the power of attorney in that particular case, as I understand it, where he was suing his own licensee. I think that was an impossible legal proposition, although I am not competent to speak on that point.

Q. And that right would rest in the language I have just read to you, as well as in the law as you have just stated?

A. I don't know whether the right rests in that particular contract or not,—the contract between the Podlesaks and the Splitdorf Company, but I know the attorneys advised that we had such a right and we exercised it.

Q. Calling your attention to another part of Exhibit D, being paragraph six thereof:

495 "Sixth: The party of the second part" (and that is the Webster Company) "agrees that it will, except as hereinafter provided, use the devices manufactured under this shop license only in connection with, or for repairs to, the devices manufactured under license which is covered by the agreement made on February 5th, 1914 by which the parties of the first part" (the parties of the first part are Henry and Emil Podlesak) "give to the party of the second part the exclusive and sole right to manufacture ignition devices covered by patents No. 947,647 of January 25, 1910, Inductor Generators for Ignition purposes, No. 948,843, issued February 8, 1910, Inductor Generators for Ignition purposes, and No. 1,003,649, issued September 19, 1911 Inductor Generators for Ignition purposes", (and here please understand the num-

bers refer to the first group of patents, having the exclusive right to make, use and sell) "and that whenever the devices covered by this shop right and license are made and sold and delivered not as a part, or, or for use in connection with, the devices manufactured and sold under the aforesaid exclusive license dated February 5th, 1914, then the party of the second part agrees that it will on the day of each and every report pay to the parties of the first part, jointly as a royalty or license fee, five per cent (5%) of all moneys or the equivalent thereof, which they may have received or that may be due them from the sales of or in exchange for the devices covered by this shop right and license sold and delivered during the preceding quarter. It is further expressly understood and agreed that the said devices manufactured embodying above improvements, or any of them, are not to be sold for less than a fair and reasonable price, based upon manufacturing and trade conditions."

496 Q. Was that particular language referred to and discussed at this meeting of August 20th, 1915?

A. No, sir, I don't think it was.

Q. Calling your attention to a further paragraph of this same contract, Exhibit D, of shop right contract, so called, between the Podlesaks and the Webster Company, being paragraph 9 thereof, I will read to you:

"Ninth: The party of the second part" (the Webster Company) "agrees that it shall not permit or encourage other parties to manufacture, use, or sell devices covered by hereinbefore mentioned patents or patents that may be granted on hereinsaid applications, or any of them, except as, and on terms and limitations hereinbefore set forth, relative to said shop licenses under patents No. 1,022,642 and No. 1,055,078."

Was that particular language discussed on August 20th, 1915?

A. I think that was discussed in a general way. We understood that to mean that the Webster Company was not to encourage anybody to infringe the patents under which they were licensed.

Q. And that is the construction which was put upon it at the discussion which you have referred to?

A. I think so.

Q. That is the way you recall it?

A. Yes sir.

Q. There is another exhibit, E., annexed to the Bill, being

an agreement called a supplemental agreement between the Podlesaks and the Webster Company, and I think you stated yesterday when your attention was called to it, that that agreement was considered in connection with the Exhibits C. and D., being the exclusive royalty agreement and shop right agreement, so called; is that so?

A. Yes sir.

497 Q. Have you, Mr. Vandeventer, or your company, so far as you know, had any negotiations with the Podlesaks with reference to any other patents or applications therefor, other than those specified and covered in the agreements with the Webster people and comprised in the option to Mr. Manning, since the time that that option was taken in August, 1915?

A. Yes sir.

Q. Does that cover a plug oscillator device, or claim to cover it?

A. No sir, I don't think so.

Q. Please state what it is.

A. Mr. Podlesak wrote me concerning some issue patents. I don't recollect the price at which he wished to sell, and I examined those patents and believe I wrote him that we were not interested in them and that terminated the correspondence. I think it related to ignition systems, or perhaps magnetos.

Q. Did it have anything to do with the plug oscillator?

A. No sir, not that I recollect.

Q. Or any improvement on the same?

A. No sir.

Q. Or did it in any way come into interference with it in any way, form or shape, as you suppose?

A. No sir, I think those patents were all prior to the pre-issue patent on the unitary bracket structure.

Q. So, at the present time, you are not in negotiations with the Podlesaks with respect to the patents?

A. No sir.

Q. You may explain, if you so desire, what you understand to be the respective properties of a magneto called rotary, and a magneto called oscillating.

A. A magneto is a small electrical generator having a permanent magnet field in which is positioned a movable
498 part known as an "armature" or "rotor". It is customary to designate a magneto in which the movable part is adapted to be continuously rotated as a "rotary mag-

neto". Such magnetos are shown on pages 4 to 15 inclusive of the booklet entitled "1915 Sumter Magnetos".

An oscillating magneto usually has an arm or finger projecting from the rotary part, which is adapted to be engaged by a moving part of the engine and pulled to one side and released, whereupon springs connected to this arm cause the arm and the moving part of the magneto connected therewith to violently oscillate. Such machines are the same as rotary magnetos and are commonly of the type shown on page 16 of the booklet just referred to, in which it will be observed illustrated the machines shown on pages 4, 12, 13 and 14 of the booklet with the addition of the extending arm and the springs.

Q. When did the negotiations begin with the Podlesaks for the purchase of their interests?

A. I recollect having been told by Mr. Manning that these negotiations began some time prior to the starting of the Charleston suit.

Q. And probably some months before, as near as you can tell now?

A. Probably.

Examination adjourned until four o'clock, Tuesday afternoon, at four o'clock for signing the testimony.

499

PLAINTIFF'S EXHIBIT 83.

IN THE UNITED STATES DISTRICT COURT
Northern District of Illinois
Eastern Division

Webster Electric Company,
Plaintiff,

vs.

Henry Joseph Podlesak, Tesla Emil
Podlesak, Sumter Electrical Com-
pany and Splitdorf Electrical Com-
pany,

Defendants.

In Equity
No. 553.

NOTICE.

Lynn A. Williams, Esq.,
Attorney for the Plaintiff,
719 Monadnock Block, Chicago.

Sir:—

Please take notice that the Splitdorf Electrical Company

of New Jersey and the Sumter Electrical Company of South Carolina, Henry Joseph Podlesak and Tesla Emil Podlesak, hereby withdraw the notice served upon the Webster Electric Company on or about October 23rd, 1915, in relation to defaults, demands, etc., pursuant to the terms of certain contracts mentioned in the Bill of Complaint.

And please take further notice that any and all claims of forfeiture by reason of any defaults on the part of the Webster Electric Company under any or all of the contracts aforesaid, the said Splitdorf Electrical Company, Sumter Electrical Company, Henry Joseph Podlesak and Tesla Emil Podlesak are hereby expressly waived pendente lite, upon condition that the sums of money falling due under the terms of said contracts by way of royalties shall be by the 500 Webster Electric Company ascertained bona fide as near as may be and within the times mentioned in the said contracts and paid over and delivered in cash, to be held for the defendant or defendants herein, said payment to be made to Henry J. Podlesak.

And if the plaintiff shall object, in writing to be served upon Charles C. Bulkley, Esq., forthwith, to paying the said monies over to Henry J. Podlesak for all of the defendants, or any of them as aforesaid, and the attorneys for all of the parties do not forthwith agree upon some other suitable person to receive the funds, then and in that event the said funds to be paid over to such person as may be indicated by the Court upon the application of any party hereto.

Upon the determination of the above entitled cause by final order or otherwise in the District Court in which the same is now pending, the waiver herein contained to cease and expire and thereupon the ascertainment of the true and just amount of royalties thereafter to become due shall proceed in all respects as if this notice had not been given, but no forfeiture because of any previous conduct shall be claimed.

SPLITDORF ELECTRICAL COMPANY OF N. J.

By CHARLES C. BULKLEY,

H. D. MOISE,

EDWARD E. CLEMENT.

SUMTER ELECTRICAL COMPANY OF SO. CAR.

By CHARLES C. BULKLEY,

H. D. MOISE,

EDWARD E. CLEMENT.

HENRY J. PODLESAK

TESLA EMIL PODLESAK

501

Chicago, Ill., Sept. 28, 1916.

Lynn A. Williams, Esq.,
Attorney for the Plaintiff,
1315 Monadnock Block, Chicago.

Sir:—

The above being a true copy of a notice executed by the undersigned and delivered to you on or about November 20, 1915, in the above entitled cause, we respectively request that the name Splitdorf Electrical Company be substituted for the name Henry J. Podlesak in the last line of the second paragraph of the aforesaid notice, and we request that all future payments made under the aforesaid notice be made to Splitdorf Electrical Company instead of Henry J. Podlesak, and we hereby approve and ratify the action of the Webster Electric Company in making its payment, due July 15, 1916, to Splitdorf Electrical Company instead of Henry J. Podlesak.

SPLITDORF ELECTRICAL COMPANY OF N. J.

By CHARLES W. CURTISS,
Genl. Mgr.

(Seal)

SUMTER ELECTRICAL COMPANY OF SO. CAR.

By

HENRY JOSEPH PODLESAK

TESLA EMIL PODLESAK

Correct Attest

M. W. BARTLETT

Secretary

Above instrument dated and delivered to Mr. Williams for Webster Electric Co. by me, and rec'd from him their check #1553 this Sept. 28, 1916.

GEORGE H. PEAKS
For Splitdorf & Co.

ABSTRACT OF

Minutes of a Special Meeting of the Board of Directors
of the

Splitdorf Electrical Company

held Thursday, December 9th, 1916, at 11 o'clock A. M.

Upon motion duly made and seconded it was

Resolved that Carlos W. Curtiss, as General Manager of the Splitdorf Electrical Company of New Jersey, shall be and he hereby is placed in general charge of the business of the said company with full authority to execute on behalf of the said company all contracts, other than commercial paper, that may be required or necessary in the conduct of the business of the said Company.

Correct Attest

M. W. BARTLETT

Secy.

(Seal)

ASSIGNMENT.

Whereas, Sumter Electrical Company, a corporation organized under the laws of South Carolina, entered into a written agreement on or about September 4, 1915, in which Emil Podlesak, of Racine, Wisconsin, and Henry Joseph Podlesak, of Chicago, Illinois, were parties of the first part and Splitdorf Electrical Company, a New Jersey corporation, and said Sumter Electrical Company were jointly parties of the second part;

And, whereas, on September 8, 1915, said Sumter Electrical Company executed a written agreement to assign all its rights arising out of or flowing from said agreement entered into on or about September 4, 1915, to said Splitdorf Electrical Company;

And, whereas, the said Sumter Electrical Company is in process of dissolution pursuant to the laws of South Carolina,

And, whereas, it is provided in Volume 1 of the Civil Code of South Carolina, for the year 1912, at page 771, Section 2815, as follows:

Upon the dissolution in any manner of any corporation, the directors shall be trustees thereof, with full power to set-

tle the affairs, collect the outstanding debts, sell and convey the property and divide the moneys and other property among the stockholders, after paying its debts, as far as such moneys and property shall enable them; they shall have power to meet and act under the by-laws of the corporation and under regulations to be made by a majority of said trustees, to prescribe the terms and conditions of sale of such property, and may sell all or any part of cash, 505 or partly on credit, or take mortgages and bonds for part of the purchase price, for all or any part of said property.

And, whereas, Charles T. Mason, Harry R. Van Deventer, and Frederick C. Manning, were members of the Board of Directors of the said corporation at the time it surrendered its charter and begun to dissolve as a corporation, and the said Charles T. Mason, Harry R. Van Deventer and Frederick C. Manning, constituted a majority of the Directors of the said corporation at that time, and thereupon became trustees of the said corporation and entered upon the charge of their duties as such trustees pursuant to the terms of the statute law of South Carolina.

Now, Therefore, in consideration of One Dollar (\$1.00) and other valuable considerations, the receipt of which is hereby acknowledged, the said Charles T. Mason, Harry R. Van Deventer and Frederick C. Manning, they being a majority of the trustees of the said corporation, do for themselves and for the said Sumter Electrical Company, hereby assign, transfer, set over, and deliver unto the said Splitdorf Electrical Company, all of the rights of the said Sumter Electrical Company, and of themselves as such trustees, arising out of or flowing from the said agreement entered into on or about September 8th, 1915, and also all of the rights of the said Sumter Electrical Company and of themselves as trustees arising out of or flowing from a certain writing executed by Emil Podlesak and Henry Joseph Podlesak at the City of Washington in the District of Columbia on the fourth day of September, A. D. 1915, and also afterward executed or to be executed by the said Sumter Electrical Company and the said Splitdorf Electrical Company, this being the agreement referred to in the first paragraph hereof.

506 In Witness Whereof, the said Charles T. Mason, Harry R. Van Deventer and Frederick C. Manning, trustees,

have executed this assignment at Sumter, South Carolina, this 26th, day of September, A. D. 1916.

CHARLES T. MASON

Trustee

HARRY R. VAN DEVENTER

Trustee

FREDERICK C. MANNING

Trustee

State of South Carolina }
County of Sumter } ss:

We, CHARLES T. MASON, HARRY R. VAN DEVENTER, and FREDERICK C. MANNING, trustees for the said Sumter Electrical Company, being first duly sworn, depose and say, that we have full power to make and execute the foregoing assignment on behalf of Sumter Electrical Company and that the execution of said assignment is our free act and deed on behalf of ourselves individually and of said Sumter Electrical Company.

CHARLES T. MASON

HARRY R. VAN DEVENTER

FREDERICK C. MANNING

Sworn to and subscribed before me September 26th, A. D. 1916, at Sumter, South Carolina.

(Seal)

R. A. BRADHAM
Notary Public in S. C.

508

DEFENDANTS' EXHIBIT NO. 1.

Waterman Letter Feb. 16, 1909.

UNITED STATES DISTRICT COURT

Northern District of Illinois,

Eastern Division.

2/19 Mr. Waterman

Webster Electric Co.

vs.

Henry J. Podlesak *et al.*

} In Equity No. 553

Milwaukee Works, February 16, 1909.

2 sheets

Magnetos.

Experimental Department,

Harvester Building, Chicago.

Gentlemen:

The Wattles Magneto: The Wattles magneto delivered to us at Milwaukee on the 26th of January, has now been given test of sufficient variety and duration to warrant preliminary report. Mr. Wattles personally was with us at this plant for several days late in January. He demonstrated and explained operation as intended by him, clearly and completely. The design of the Wattles magneto, operated primarily by means of gases under compression before ignition regulated by suitable mechanical attachment to ignitor-rod, is clever to say the least, and all points considered, except perhaps with reasonable question as to durability, there seems to be little doubt why it cannot be constructed so as to be reasonably practical for manufacture.

These two samples we have had on trial, as might naturally be supposed of the first of new product, have not shown themselves to be of proper proportion and of sufficient strength to stand up at all well under the wear and tear of continuous use. So far as doing good work electrically is concerned however, up to that point when breakage has occurred, although the spark has been weak, probably because of winding not just suitable, the magneto has given indication of fulfilling its bill nicely. Its general construction has these decided ad-

vantages: It can be quickly and satisfactorily attached to engines in the country; it works only at the time of an explosion; it consumes very little power for its operation; and its cost to manufacture in quantity, should not much exceed \$4.00 or \$5.00.

If this Wattles magneto is to be considered suitable for use on our engines, it must be completely re-designed. Its parts must be made stronger,—and possibly these parts can be made of different form, and less in number, and at the same time give results desired. Mr. Wattles has stated that he would like to have us experiment with this mechanical construction here at Milwaukee, and suggest a form which would be satisfactory to us and yet contain his general principle. We have begun work accordingly; and are now making such alterations as we think will be necessary for satisfactory service and proper report on this subject.

HAW-G

509 Electrical Department.

February 16, 1909.

Magnetos in General: It may be worth while to add that after considerable study of this general question, we are not by any means satisfied we have yet found a magneto entirely satisfactory from the standpoint of manufacture or of service free from trouble. The Milton magneto when new and properly adjusted, works nicely. Its general form and the way in which it is attached to the engine however, demanding as it does, small clearance and an excessive torque for its operation, causes it to be very easily worn or shaken out of adjustment. The moving parts soon wear considerably, and when once in this condition, service is very unsatisfactory. We take for granted the Webster people without further delay, will take energetic steps to strengthen such parts as are not sufficiently strong or secure, for work intended; that they will consider the value of eliminating action except on the explosion stroke, if this result can be obtained without unreasonable complication, and that they will reduce the amount of power at present required for operation. Until such change has been made, and magnetos come to us in such form as to stand up well under service required, they hardly can be considered satisfactory.

The Wattles magneto, on first glance, looks well. There is reasonable question however, as to whether or not a rapidly moving piston of small size in the long run will be sufficiently durable to be sure to be free from trouble, and prove satisfactory in the hands of the average farmer. There is not

much question that so long as this piston does work properly, and parts intermediate between it and the rotary part of the magneto are suitably proportioned for work intended, the outfit will work well. But whether or not this Wattles magneto will be considered best for use on our regular line of engines, will depend upon the way in which it will compare favorably with the Milton magneto, or perhaps some form similar to either one of these two, after both the Milton and the Wattles magnetos have been improved in design and construction considerably. Feeling sure these statements are correct, personally I am rather inclined not to recommend too much haste in decision of this question of judgment on magnetos. At least we should not make any change from our present practice until we are thoroughly convinced that the magneto to be adopted will be efficient and durable in every particular, and can be manufactured at low cost,—preferably at this plant. We will continue to study this subject carefully, and will report further as soon as we have data of real value to parties interested.

Yours very truly,
INTERNATIONAL HARVESTER COMPANY
Milwaukee Works.
H. A. WATERMAN

HAW-G

510

DEFENDANTS' EXHIBIT NO. 2.

U. S. DIST. COURT,
Northern Dist. of Illinois
Eastern Division.

| | |
|---------------------------------|-------------------|
| Webster Electric Co. | } In Eq. No. 553. |
| <i>vs.</i> | |
| Henry J. Podlesak <i>et al.</i> | |

"Waterman letter to Maurice Kane Apr. 6 1909"

April 6, 1909.

Mr. Maurice Kane.

Drawings have been completed showing arrangement for attaching one additional drum to the frame of our present 8 HP hoisting outfit, to better adapt this rig for pulling stumps, and work on small patterns has been started for the construction of one of these outfits.

Preliminary sketches have been made in preparation for designing spray pumps to be manufactured at this plant.

Drawings have been completed and patterns are well under way on the following:

3 HP Hopper-Cooled Cylinder, to be used on the regular 3 HP air-cooled frame.

6 HP Hopper-Cooled Cylinder, for use on the regular horizontal engine frame of same rating.

The 8 HP sliding table saw truck is nearly completed. The 4 HP hopper-cooled engine has been mounted upon one of the regular tilting table saw trucks, arranged to have balance-wheel on saw-arbor or on shaft separate from saw-arbor, as desired. Both of these outfits will be ready for test within ten days.

Parts for the new 25 HP horizontal engine have been completed and the engine soon will be ready for test.

Parts for the 35 HP plowing tractor are coming forward in good form, and conditions to date indicate we shall be able to have this engine ready for test about the 1st of May, as first promised.

Work is under way perfecting the durability of the Wattles Magneto, and considering some better means of attaching the Milton Magneto to engine.

The results of the regular routine of experimental work seem to be entirely satisfactory.

Yours very truly,
INTERNATIONAL HARVESTER COMPANY,
Milwaukee Works.

H. A. WATERMAN,
Superintendent.

HAW-K

511 DEFENDANTS' EXHIBIT NO. 4.

"T. K. W. letter to Milton, Apr. 16 09"
Union League Club,
Chicago.

U. S. DIST. COURT

North Dist of Illinois

Eastern Division

Webster Electric Co. }
vs. } In Equity No. 553
Henry J. Podlesak }

Apr. 16—09

Dear Milton

Mr. Tyson telephoned that the International would send Engine over to our place—I wish you would arrange to take a/c of stock of material on hand May 1st also complete list and prices of tools in your Igniter Dpt— Please write me at N. Y. 88 Reade St how the small sized magneto carries on—if you get a good spark?

T K W

523 DEFENDANTS' EXHIBIT NO. 15.

Webster M'f'r Co.,
88-90 Reade St., T.K.W.—W.
New York, N. Y.

Apr. 22, 1909.

Mr. John L. Milton,
% Webster M'fg. Co.,
Chicago, Ill.

Dear Milton:—

I have apparently succeeded very well here. I have got a man who is interested, who owns control of the Maxwell-Brisco Company. They are putting out 6,000 or 7,000 a year, and from all the reports I can hear, he is our kind of a man; he is a banker, and it is reported he has got the money. All of the experts which he has put on it so far have reported favorably.

Our arrangement is that I shall come back next week with a machine and put it on the Maxwell-Brisco car of his here in New York, and if after one weeks trial it is satisfactory, he will accept our proposition.

Unless you are right in the midst of work that you cannot stop, or if it is going to hinder your work really, I wish you would meet me at the Michigan Central Depot, 12th St. & the Lake, at 3:30 P. M. Friday which is the time, the train is due, which leaves here today oat 4:30, and I can at once take up with you the whole situation. If you find that it is going to delay important work, I wish you would hand this letter to Bob Brinkley, and have him meet me.

Yours truly,

T. K. WEBSTER

512

DEFENDANTS' EXHIBIT NO. 5A.

(Letterhead of Hotel Seville, New York)

Dear John

Had a very interesting interview with Mr. Hill of "Fairbanks." Also interviewed the Prest. Mr. Wells—Mr. Haddock—and two of their foreign representations. If the attachment of the # magneto proves out alright on Field B tho will put it on all their engines— They will have Bates & Edward send one of their engines to put the spring type on—

The other style back of fly wheel was so hard to start that
513 they has not been selling any We must follow up both of them as soon as possible

Yours truly

T. K. WEBSTER

Pres.

May 1—09

518

DEFENDANTS' EXHIBIT NO. 10.

Webster M'f'r Co.,
88-90 Reade St.,
New York, N. Y.

T.K.W.—W.

May 1, 1909.

Mr. John Milton,
% Webster Mfg. Co.,
Chicago, Ill.

Dear Milton:—

I want you to use every effort you can to get a magneto on your car, for I think it is quite possible that I will bring the party out to Chicago very shortly, and should not like to have them find your machine dismantled without the magneto.

Yours truly,

T. K. WEBSTER
Prest.

519

DEFENDANTS' EXHIBIT NO. 11.

Webster M'f'g Co.,
88-90 Reade St.,
New York, N. Y.

T.K.W.—W.

May 6, 1909.

Mr. J. Milton,
Webster M'fg. Co.,
Chicago, Ill.,

Dear Milton:—

Chiville arrived here, and will proceed at once to get the magneto on the car. We found the gear on the end of the timer shaft so that we got on the driving mechanism very easily. The exhaust pipe was in the way, and we had to send to Tarrytown for a different type, which we expect to arrive by express this morning.

The most serious difficulty that we are encountering is in getting the connecting rod on the magneto from the steering column. We have to make two bends which makes it rather awkward. Chiville tried to use the rod he brought with him, but it was too light, and now we are putting in a heavier one. If we should find this really a serious difficulty, it is possible I may wire you to ship your car by express. I hardly

think I shall have to do this, and would only do so as a last resort.

I have your letter regarding the Bates & Edmond proposition. We have got to go down and see these people, and get them interested again. Fairbanks are now going to help us all they can. It might be possible that we will dispose of the old style later on.

Yours truly,

T K WEBSTER
Pres

Chiville just telephoned he got the connection fixed O K

520

DEFENDANTS' EXHIBIT NO. 12.

Webster M'f'r Co.,

88-90 Reade St.,

New York, N. Y.

T.K.W.—W.

May 8, 1909.

Mr. John Milton,

Chicago, Ill.

Dear Milton:—

I wish you would advise me just how you are getting on with the smaller type of magneto, and also if you have done anything further in developing the coil.

I believe the magneto is appreciated more here in New York than in Chicago. I have written you in another letter the details. We are going out again this afternoon about three o'clock.

I do not consider that the magneto has yet had a fair chance, because of the carburetter trouble, but the man who is running the car is a old, experienced automobile man, and he does not blame the magneto for anything the carburetter does.

I wish you would reply to these questions so it will get on the 20th Century Monday and get to me Tuesday, for I have a faint hope that I might be able to start back the middle of the week, although it is not a very strong expectation.

Yours truly,

T K WEBSTER

521 DEFENDANTS' EXHIBIT NO. 13.

Webster M'f'r Co.,
88-90 Reade St.,
New York, N. Y.
T.K.W.—W.
Webster's M'fg Co.,
Att. John Milton,
Chicago, Ill.

May 8, 1909.

Dear Sir:—

Regarding the magneto. We went out yesterday and gave the car another trial. The car was not equipped with a speedometer, and that took some time yesterday to put it on. The car also has a new Strongberg carburetter on, and the Chauffeur is not acquainted with it resulting with our having a lot of carburetter trouble, but he magneto behaves handsomely, and up to the present time everybody is well pleased with it.

Chiville is turning out a very valuable and efficient man.

Yours truly,

T K WEBSTER
Pres

522 DEFENDANTS' EXHIBIT NO. 14.

J-L-M

5-10-1909.

Mr. T. K. Webster, Pres.
Webster M'f'g Co.,
New York City.

Dear Mr. Webster—

I have your two letters of the 8th inst. and in reply thereto desire to state that we have ordered dies for the smaller type of low tension magneto which is to be used on the Harvester work. The smaller type magneto for jump spark work has been necessarily side-tracked for the various interruptions. Just prior to taking our inventory we had to concentrate our attention on getting the equipment ready for Mr. Chiville. The inventory was a serious interruption and since then we have been very busy attending to the Harvester Co.'s demands. They have gotten intensely impatient, telephoning several times a day as well as telegraphing us from Milwau-

kee. This has all been supplemented by many letters so you can readily see why we have concentrated our attention to this live business. We expect to make shipment to-day that will satisfy their immediate demands, which will allow us to go back to the high tension magneto tomorrow. I have done nothing further on the completion of the small high tension coil.

I am pleased to note from your various communications that the magneto is working satisfactory.

Yours very truly,

JNO. L. MILTON

514

DEFENDANTS' EXHIBIT NO. 6.

UNITED STATES DISTRICT COURT.

Northern District of Illinois

Webster Electric Company }
vs. } Equity No. 553
Henry J. Podlesak *et al.*

J.L.M.—L.K.

May 21, 1909.

Mr. T. K. Webster,
New York City.

Dear Mr. Webster;—

We are today in receipt of a letter from Bates & Edmonds Motor Co., advising us that Fairbanks & Co. had asked them to send us an engine, for attaching our oscillating type of magneto. We are writing them to send it at once as we can give it immediate attention.

I am writing you today to urge your getting the Fairbanks Co. to take the 150 magnetos that we have made especially for their small vertical engine, for the reason that as soon as they see this oscillating type of magneto they will not consider this old type, whereas now they very probably would, especially if we quote them a low price. I would recommend going as low as \$5.00 or \$6.00. This would enable the to use the battery for starting and then switch over to the magneto. You probably know that this magneto has proven thoroughly satisfactory to them with the single exception of the starting. It is as permanent and durable as

a magneto can be made with the present knowledge of it so it will not be offering them an inferior article. Soliciting your careful consideration to the above, I am

Yours very truly,

J L M

516

DEFENDANTS' EXHIBIT NO. 8.

Webster M'f'r Co.,
88-90 Reade St.,
New York, N. Y.
T. K.W.—W.

May 21, 1909.

Webster M'fg Co.,
Att. John M. Milton,
Dear Milton:—

I called at the Garage today, and I find that Chiville did not fasten the rod that works the magneto, securely enough, and that this came out. They are putting on a new one and are having some difficulty in getting it to swing sufficient to spark from the seat.

Mr. Toner also reports that he was out in a shower, and that while the wiring did not get thoroughly wet, yet it effected the magneto quite a little, making it miss. I thought best therefore, to wire for Chiville to come on, because there are various questions which will undoubtedly come up which I will need advise and help on.

Yours truly,

T K WEBSTER

515

DEFENDANTS' EXHIBIT NO. 7.

(Letterhead of Webster M'f'g Co.)

Dictated by T.K.W.—W.

New York, U. S. A. May 22, 1909.

Mr. John Milton,
Webster M'fg Co.,
Chicago, Ill.

Dear Milton:—

Chiville arrived on time, and I find that what happened was where he attached the rod to the magneto. This connection gave way, and when they put it on again attaching it to the regular place to attach it, they could not get sufficient swing

to get started from the seat. This we are remedying today. I also received the foreign patents in the hands of Chiville.

Am glad to know that the Harvester magneto has been expressed.

I have just seen Mr. Knight, and he tells me that they are intending to put the magneto on a 45 HP car. Chiville has expressed himself as being afraid that our magneto will not serve a 45 HP car. I had always supposed that our magneto was plenty big enough for any car. Do you think Chiville is right? Answer me by 20th Century.

Yours truly,

T K W
President.

517

DEFENDANTS' EXHIBIT NO. 9.

J-L-M

5-24-1909.

Mr. T. K. Webster, Pres.
Webster M'f'g Co.,
New York City.

Dear Mr. Webster:—

I have your letters of the 21st and 22nd inst. Mr. Toner's experience with the car in the rain, is nothing out of the ordinary for any Jump Spark system. The dampness does not affect the magneto itself, the whole trouble rests with the high tension wiring. This as you probably know is the most serious objection to any high tension or jump spark system, and it is for this reason particularly that the low tension system is the most reliable. I know of no reason why the Magneto that you have will not answer for a 45 HP motor. It has been my experience with stationary engines that the bigger the cylinders and the higher the horse power, the easier it is for the magneto.

Yours very truly,

Jno L. M.

526

DEFENDANTS' EXHIBIT NO. 22.

(Letterhead of Webster M'f'g Co.)

Dictated by T.K.W—LK.

Chicago, Oct. 25, 1909.

Mr. John L. Milton,
American Express Co.
#6 Haymarket,
London, W. C.

Dear Sir;—

I went out to the Harvester Co. today and find that they have been having very poor success indeed in the foreign trade with the Milton magneto of the square type attached by the boss to the engine.

We received, a short time ago, a letter containing twelve counts against this machine. They are greatly discouraged about it. In fact, they were ready to abandon it, had not Mr. Cavanagh sent them a cable last week, advising them that the new machine had overcome all the objections they spoke about in the old one.

I think if you wish to retain the foreign trade for the Milton magneto, it would be well for you to go over to Hamburg, and see Mr. W. V. Couchman.

We are sending him, by express today a model of the low tension machine as it is now adopted by the Harvester Co. They have been delayed in making shipments of engines with the magnetos, though I believe they now have two or
527 three on the ocean and more are going through. The delay has not been our fault but the fault of the factory at Milwaukee in not getting out the attachments promptly.

Yours very truly,

T K WEBSTER
Pres.

528

DEFENDANTS' EXHIBIT NO. 22A.

Novr. 10th 1909.

W. V. Couchman Esq.,
c/o The International Harvester Coy.,
Hamburg.

Dear Sir,

On my return from the continent this morning I find a letter from the Webster Mfg. Coy. Chicago, advising me that

you have had some serious trouble with the attachments of our square type of magneto, also that Mr. Cavanaugh of the International Harvester Coy. Chicago, had advised you that the present method of attaching our magneto to your engines had entirely overcome all of the objections set forth in your past letters. I am also further advised that the Webster Mfg. Coy. have forwarded to you a working model of our magneto as attached to your horizontal engines.

After you have received the above model, if you are not then entirely convinced that the troubles referred to are not completely overcome, or that there are any further changes you would like to consider with me, or still further if there is any assistance that I can personally render you, I shall be pleased to call on you at your Office.

Awaiting your advices, and thanking you for the assistance you have rendered us, and the interest you have taken in our magneto, I am,

Yours very truly,
JNO. L. MILTON.

529

DEFENDANTS' EXHIBIT NO. 22B.

Novr. 10th 1909

Mr. T. K. Webster, President,
Webster Manufacturing Coy.,
2410 West 15th Street,
Chicago, U. S. A.

Dear Sir,

On my return to London this morning I find a letter from you under date of Octr. 25th.

I wish to thank you for same, and in connection with this matter desire to state that I have to-day written Mr. Couchman at Hamburg regarding my calling on him.

I trust that the Milwaukie Works are not having any further trouble with the attachments for magnetos. I have felt a certain amount of uneasiness regarding their making these attachments correctly, due to the fact that they made the old style ones with very bad workmanship, which I believe is the principal trouble that Mr. Couchman is experiencing now.

Yours very truly,

530

DEFENDANTS' EXHIBIT NO. 22C.

(Duplicate of Exhibit No. 22C.)

551

DEFENDANTS' EXHIBIT NO. 30.

(Letterhead of Brown & Williams, Attorneys.)
Chicago, Sept. 10, 1910.

Mr. John L. Milton,
C/o Webster Electric Co.
Tiffin, Ohio.

Dear Sir:—

We beg to acknowledge receipt of your favor of Sept. 8th enclosing the papers in the matter of British application No. 24,838, or '09. We are writing to ascertain whether or not the corresponding United States application is to be filed.

We shall let you know promptly of the decision in this matter.

Yours very truly,

BROWN & WILLIAMS
Tiffin, Sept. 29, 1910.

Mr. Lynn A. Williams
B. & W. Chgo Ill.
My dear Mr. Williams:—

I have not received further reply to your letter of the 10th inst. The time in which to get this application (British No. 24,838 of '09) has almost expired. I am obliged to request you to advise me by return mail your decision as well as that of the Webster Mfg. Co. on this matter. Please let me have the information as asked.

Y. T.
Jno. L. M.

550

DEFENDANTS' EXHIBIT NO. 29.

(Letterhead of Brown & Williams, Attorneys.)
Chicago, Oct. 1, 1910.

Mr. John L. Milton,
C/o Webster Electric Co.,
Tiffin, Ohio.

Dear Sir:

Replying to your letter of September 29th, I have to say that we called the matter of the application covering the subject matter of the British patent No. 24838/'09 to Mr. Webster and the Webster Electric Company but have had

no reply. I do not believe they would wish me to decide the matter on my own initiative. I have therefore written them again enclosing a copy of your letter.

Yours very truly,

LYNN A. WILLIAMS

October 10th, 1910.

Mr. T. K. Webster, President
% Webster Mfg. Co.
Chicago.

My Dear Mr. Webster:

Mr. Lynn A. Williams has informed me that he has asked you for instructions regarding filing an application for United States patent on the invention disclosed in my British application #24,838/09 and that you had not replied. Please decide this question and advise Brown & Williams and me immediately.

I regard this case of importance and believe it is to be worth a patent.

Yours truly,

JNO L. M.

(Letterhead of Brown & Williams, Attorneys.)
Chicago, October 13, 1910.

Mr. John L. Milton,
c/o Webster Electric Company,
Tiffin, Ohio.

Dear Sir:

You will appreciate that I must be a little careful about taking up application work for you. I have, therefore, shown your letter to Mr. Linthicum. He says that there can be no objection to my taking up the work for you if the Webster Company is not interested. I have talked also with Mr. Webster over the telephone and have told him that I should like to file the application for you if he does not wish to do anything with it. He promised to come in today and to come to a final decision one way or the other. If the Webster Company does not care to do anything with the matter, I shall be glad to take it up for you and will proceed with the

preparation of the papers at once. We can have them ready in the course of four or five days and that will give us time to make any corrections or revisions that may be required before they are executed and filed.

I will write you tonight, telling you whether or not
536 Mr. Webster has been here and, if he comes, the result of our interview.

Yours very truly,

LYNN A. WILLIAMS

537

DEFENDANTS' EXHIBIT NO. 25.

(Letterhead of Brown & Williams, Attorneys.)
Chicago, October 13, 1910.

Mr. John L. Milton,
c/o Webster Electric Company,
Tiffin, Ohio.

Dear Sir:

Mr. T. K. Webster has been in talking with me about the United States application covering the subject-matter of your British application, No. 24,838/09. He will not be able to come to a definite conclusion until tomorrow when he wishes me to look over one of the low tension machines which the company is now making.

I told him that you appreciated the importance of having the United States application filed at once and that you were, therefore, insistent that a decision should be reached. I told him that you were right in appreciating the importance of prompt action. The result of our conference was that we shall proceed at once with the preparation of the application papers and before they are finished Mr. Webster will have come to a decision. If he does not wish to file the application, it will be available to you for that purpose and can
538 be filed easily within the time limit.

Yours very truly,

LYNN A. WILLIAMS

DEFENDANTS' EXHIBIT 37.

(Letterhead of Brown & Williams, Attorneys)

Chicago October 25, 1910

Mr. John L. Milton,
Tiffin, Ohio.

Dear Sir:—

I have been doing my level best to revise your Case 10 and get it in such shape that you can send it to the Commissioner of Patents.

I think now you will find it in such shape that it can be filed even if it is not in the shape in which you would like to have it issue.

We have been overwhelmed with work here recently and Mr. Boettcher was not able to dictate the former draft of the specification and claims until late Friday night when he mailed the papers to you without my having had an opportunity to see them. I thought it important that you should get them Saturday and I thought it best, since we had the British papers to follow in preparing the United States case, to have the papers forwarded even though I could not see them.

Since looking them over I think possibly they do not bring out the advantages of the construction as fully as might have been done. However, both the original draft and the present set of papers are sufficient to explain the construction 559 and if they are not yet in satisfactory shape, we can make the necessary changes by amendment.

The British application referred to means controlled by the engine governor for regulating the up and down position of the reciprocating rod. It would be necessary in the United States, however, to show some such mechanism or else to cancel all reference to it and I have thought it best therefore to add an illustration of the auxiliary roller for controlling the position of this rod.

You can file the application as suggested by forwarding the original specification properly executed together with the drawings to the Commissioner of Patents. Do not fail to enclose a money order for \$15.00 filing fee.

Yours very truly,

LYNN A. WILLIAMS

554

DEFENDANTS' EXHIBIT 34.

(Letterhead of Brown & Williams, Attorneys)
Chicago, Dec. 3, 1910.

Mr. John L. Milton,
C/o Webster Elec. Co.,
Tiffin, Ohio.

Dear Sir:

We are just in receipt of a Patent Office Action in the matter of your application, Case 10 for patent on your improved Magneto Generator. The examiner requires a new oath and also asks for further illustration of the cam surface on the yoke which forms part of the mechanism. We shall follow up this matter as promptly as possible.

Yours very truly,
BROWN & WILLIAMS.

552

DEFENDANTS' EXHIBIT 31.

(Letterhead of Brown & Williams, Attorneys)
Chicago January 5, 1911.

Mr. John L. Milton,
c/o Webster Electric Co.,
Tiffin, Ohio.

Dear Sir:

Since the Webster people have not indicated any wish to secure the rights under your patent application, Case 10, which was recently prepared and filed, we are charging the matter to you and shall handle the application for you in accordance with the request contained in the letter in which the matter was presented to us. As the matter of the charge has been somewhat delayed, pending the decision of the Webster Company, we should like to have the account settled promptly.

Yours very truly,
BROWN & WILLIAMS.

Enclosure.

DEFENDANTS' EXHIBIT 32.

(Letterhead of Brown & Williams, Attorneys)

Chicago February 7, 1911.

Mr. John L. Milton,
% Webster Electric Co.,
Tiffin, Ohio.

Dear Sir:

We enclose herewith our statement covering the matter of your Case 10, regarding which the decision of Webster Electric Company has been so long delayed. We wrote Mr. Webster that unless we heard from him that the Webster Electric Company wished to take up the application, we would regard it as your own personal application and bill you accordingly. We do not know whether the matter is still under consideration by the Webster Electric Company, but under the circumstances we do not wish the payment of the bill delayed further. Will you, therefore, be kind enough to let us have your check to cover the amount? If later the Webster Company takes up the application, you can, of course, adjust this matter with it.

Yours very truly,

BROWN & WILLIAMS.

Enclosure

DEFENDANTS' EXHIBIT 36.

(Letterhead of Brown & Williams, Attorneys)

Chicago February 7, 1911.

Mr. John L. Milton,
% Webster Electric Co.,
Tiffin, Ohio.

Dear Sir:

This morning I find the three samples of yoke to which you referred yesterday.

One of them contains a screw head adapted to engage the actuating crank or lever of the contact point. I cannot see that the other two are substantially different from one another in so far as the engagement of the actuating lever of the contact mechanism is concerned. If there is a difference, will you kindly drop us a line stating what it is?

The arm which carries the hardened engaging surface of

one of these two yokes carries an extension substantially in line with the axis upon which the yoke turns. It may be that this part is in some form of the device the one which actuates the contact points. If that is the case, we should like to be advised of it.

If not, kindly let us know what that extension is for and with what parts is cooperates.

557 We shall undertake to draw claims broad enough to cover all of the various forms.

Yours very truly,

LYNN A. WILLIAMS

560

DEFENDANTS' EXHIBIT 38.

Feb. 8, 1911.

Mr. T. K. Webster, Pres.,
Webster Mfg. Co.,
Chicago, Ill.

Dear Mr. Webster:

With reference to my U. S. patent application No. 589564 covering the trip finger and spring yoke, desire to state that Mr. Williams' seems quite anxious to know for whom he has and is handling this case. He has just sent me a second invoice for this work. If you do not care to have this patent taken out, please send Brown & Williams a check for \$82.50, as per the enclosed invoice, and charge same to my account.

Yours very truly,

JLM.BG

555

DEFENDANTS' EXHIBIT 35.

(Letterhead of Brown & Williams, Attorneys)

Chicago February 9, 1911.

Mr. John L. Milton,
c/o Webster Electric Co.,
Tiffin, Ohio.

Dear Sir:—

Your letters of February 8th are received, one acknowledging the receipt of the memorandum in Cases 12, 13 and 14, another enclosing a letter to Mr. Webster regarding Case 10, and the other explaining the four samples of yokes which you have left with us or sent us.

We shall see to it that the claims in Case 10 are broad enough to cover the several styles of yoke.

Yours very truly,

BROWN & WILLIAMS.

DEFENDANTS' EXHIBIT 50.

2-5-19 E L C

(Letterhead of The Webster Electric Company)

Racine, Wisconsin July 23, 1914

Messrs. Hood & Schley,
908 Hume-Mansur Bldg.,
Indianapolis, Ind.

Gentlemen:

In reply to your letter of July 3, 1914, we beg to advise you that according to the information we have regarding the Hercules Electric Company's construction, claims 13, 14 and 15 of Podlesak patent 1,055,075 are infringed thereby. We trust that you will have no difficulty in applying the claims mentioned to the Hercules construction.

We also call your attention to Milton patent No. 1,096,048, which patent we believe is also infringed by the construction employed by the Hercules Company. Your attention is particularly directed to claim 6 of the Milton patent mentioned. For your information we are enclosing herewith a copy of patent No. 1,096,048.

Yours very truly,

THE WEBSTER ELECTRIC CO.

By S. A. LOEB

Vice Pres.

SAL:DP

Enc.

DEFENDANTS' EXHIBIT 72.

(Letterhead of Williams & Bradbury, Attorneys)

Chicago April 22, 1915.

Mr. Henry J. Podlesak,
1636 Millard Avenue,
Chicago, Illinois.

Dear Sir:

The Answer of the Alamo Company in the suit on the bracket patent alleges that the Webster Electric Company should be joined as a party plaintiff. If such is the case, it can be done by amending the Bill, but the Bill should be amended promptly, otherwise a considerable delay is likely to be entailed.

I should like, therefore, to amend the Bill of Complaint

by joining the Webster Electric Company as a plaintiff. If we do this, we shall have to show the Webster Electric Company's interest in the matter because of its license. The shop-right license to the Webster Company alleges that the patents, including the bracket patent, are owned jointly by yourself and Emil. If such is the case, it would probably be necessary to join you also as a party plaintiff. I should like, therefore, to learn what evidence we have of your joint ownership in the bracket patent.

If you can drop into the office at your convenience, we can go into the matter in further detail and determine just what to do with reference to an amendment of the Bill of Complaint in view of the papers or contracts relating to your interest and that of the Webster Electric Company in the patent.

Yours very truly,

LYNN A. WILLIAMS

563

DEFENDANTS' EXHIBIT 41.

(Letterhead of Williams & Bradbury, Attorneys)

Chicago November 19, 1915.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40 E. Lafayette Ave.,
Detroit, Mich.

Dear Sir:

I have been so very fully occupied that I have not until today had an opportunity to finish up the Trust Agreement by which I am authorized to fill in my name as Trustee in the blank assignment by which you were to be secured in the payment of the Webster Electric Company's notes. I am now enclosing, however, four copies of this Trust Agreement. Will you be kind enough to sign three of the copies with your name and return them to me whereupon I shall secure the signature of the Webster Company and after signing them myself I shall return one fully executed copy to you and return one to the Webster Electric Company, retaining the other signed copy for my own files. The fourth copy enclosed herewith may be retained by you as a memorandum.

In drawing this Trust Agreement it has been my purpose to follow exactly the substance of the Escrow Agreement but to arrange for filling up the blank assignment so that it may

be recorded and so that some one will have title in order to commence and maintain suits against infringers.

I believe the execution of the Trust Agreement will
564 secure you in the payment of the notes just as fully as did the Escrow Agreement and that the Webster Electric Company will be fully protected in case the notes are paid, as I have no doubt will be the case.

Mr. Brown of the Webster Electric Company has advised me, regardless of the execution of this Trust Agreement, that if on the first of each month hereafter you will forward not only the note which matures on that date but also the four additional notes which have the longest time to run the Webster Electric Company will pay all five of the notes. Mr. Brown was, in fact, a little surprised that you did not send him five of the notes on or about the first of November and unless I hear from you to the contrary he will expect you to send him five of the notes for payment each month. If you prefer to have the Webster Electric Company authorize this I have no doubt Mr. Brown will do so if you will drop him a line.

Yours very truly,

LYNN A. WILLIAMS

Enclosures.

Nov. 29th, 1915.

Mr. Lynn A. Williams,
Monadnock Block,
Chicago, Illinois.

Dear Sir:—

I have just had an opportunity to go over the former papers dealing with the Webster settlement and find that there is quite evidently an omission in the Trust agreement which you have just drawn up.

The original general agreement between the Webster Manufacturing Company, Webster Electric Company, T. K. Webster, and myself of the 10th day of April 1912 in the 10th clause, gives me the right, by reason of an assignment, to use the invention covered in case 2 and case 5 for high tension ignition apparatus, whereas your Trust agreement does not make provision for this. It seems to me that a recorded license would be necessary.

Aside from this, I do not see any reason why the papers you have now prepared cannot be signed in accordance with our conversation on the subject.

In your letter accompanying these papers you stated that Mr. Brown would be willing to give me a letter setting forth their willingness to pay the four extra notes each month until all of them are disposed of. If this could be done and still be agreeable to all parties, I should like to have it.

Yours very truly,

JLM:LRJ.

562

DEFENDANTS' EXHIBIT 40.

(Letterhead of The Webster Electric Company)

Racine, Wisconsin June 2, 1916.

Mr. John L. Milton,
40-46 East Lafayette Ave.,
Detroit, Michigan.

Dear Sir:—

We paid \$1000.00 of your notes yesterday and it had been our intention to request you to send the balance of them at that time, and if you will kindly do so they will be paid on presentation, and you may so advise the bank in sending them in.

Hope you are find trade conditions satisfactory and are not having the trouble so many are of getting material.

Awaiting your esteemed favors, we are

Yours very truly,

THE WEBSTER ELECTRIC CO.

By WALTER BROWN

Gen. Mgr.

WB:DP

566

DEFENDANTS' EXHIBIT 43.

June 7th, 1916.

Dictated June 6th.

Webster Electric Company,
Racine, Wisconsin.

Attention of Mr. Walter Brown.

Dear Sir:—

Upon my return to the office this morning, I found your letter of the 2nd inst. and have this day advised the National Bank of Kentucky to forward the notes.

Although my direct connection with the Webster magneto has been severed, I have always held a personal interest in it and am pleased to hear the indirect reports of the splendid success with which your Company is meeting.

Will you be kind enough to let me have copies of your publications regarding the present product?

Thanking you in advance for same, your letter and the anticipated payments, I am

Yours very truly,

JLM:LRJ

567

DEFENDANTS' EXHIBIT 44.

(Letterhead of Williams & Bradbury, Attorneys)
Chicago September 11, 1916.

Mr. John L. Milton,
c/o Motor Ignition & Devices Co.,
40-46 Lafayette Ave.,
Detroit, Mich.

Dear Sir:

As opportunity has offered Mr. See has interviewed all of the possible witnesses as to the inventorship of the unitary plug and bracket arrangement which is involved in interference No. 39,013 between your patent and the Kane application, and I have just been reviewing all of the drawings and reports of interviews and the affidavits of the various parties.

There is no question but what there is more definite and explicit corroborative evidence to support Kane's allegations than there are to support your allegations. Under the circumstances I am convinced that we would have a better prospect of sustaining the patent containing these claims if made by Kane than if made by you. Under the circumstances we should like to file a concession of priority in favor of Kane, and have drawn up such a form. Will you be kind enough to execute the original copy of this concession and re-
568 turn it to me at your early convenience? Please be kind enough also to have two parties sign as witnesses to your signature.

For the purposes of your records I am enclosing an extra carbon copy which you may retain.

Yours very truly,

Encl.

LYNN A. WILLIAMS

JLM:SR

569

DEFENDANTS' EXHIBIT 44A.

UNITED STATES PATENT OFFICE.

John L. Milton
vs.
Edmund Joseph Kane } Before the Examiner of
Interferences.
Interference No. 39,013.

Concession of Priority.

John L. Milton, a party to the above entitled interference, hereby concedes priority of invention to Edmund Joseph Kane, the other party to said interference, as to all of the six counts which constitute the issue of said interference.

Signed at the City of _____, in the County of _____, and State of _____, this _____ day of _____, 1916.

Witnesses:

DEFENDANTS' EXHIBIT 44B.

September 13th, 1916.

Williams, Bradbury & See,
1315 Monadnock Block,
Chicago, Illinois.

Gentlemen:—

In reply to your letter of the 11th inst. dealing with Interference No. 39,013, would say that I can not concede priority because I personally am positive that Kane is not entitled to it and second, I am by no means convinced but that sufficient Court Proofs may be found to establish this.

While my title to this particular Patent has past, I am still personally interested enough in it to see that the right sort of treatment is accorded it.

Trusting that you recognize our position in the matter, I am

Yours truly,
MOTOR IGNITION & DEVICES COMPANY,

DEFENDANTS' EXHIBIT NO. 49.

2—390.

UNITED STATES OF AMERICA,

DEPARTMENT OF THE INTERIOR,

United States Patent Office.

To all to whom these presents shall come, Greeting:

This Is To Certify that the annexed is a photographic copy from the Records of this Office of the File Wrapper and Contents, in the matter of Interference Number 39,013, Milton vs. Kane, Subject-Matter: Magneto Generator.

In Testimony Whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 8th day of November, in the year of our Lord one thousand nine hundred and eighteen and of the Independence of the United States of America the one hundred and forty-third.

F. W. H. CLAY

Acting Commissioner of Patents.

571

DEFENDANTS' EXHIBIT NO. 49.
UNITED STATES OF AMERICA

DEPARTMENT OF THE INTERIOR

United States Patent Office.

Photographic copy of File Wrapper and Contents Interference No. 39,013 Milton vs. Kane Subject-Matter: Magneto Generator.

572

1915

Vol. 40,

Page 487.

Interference.

No. 39013

John Lewis Milton Pat 1,096,048

vs.

Edmund Joseph Kane

Magneto Generator

D. 2097
(Div. of S. 541,428)

Division 28

All communications should be addressed to Letter No. 1.
 "The Commissioner of Patents,
 Washington, D. C."

DEPARTMENT OF THE INTERIOR,
 United States Patent Office,
 Washington, D. C.

Aug. 17, 1915., 190

Examiner of Interferences:

An interference is found to exist between the following cases, and in respect to the invention therein specified, to wit:

CASES.

*((2) 1.) Name (1) Edmund Joseph Kane
 Post-office address 123 South Waller St., Chicago, Ill.
 Title Electric Igniters
 Filed Jan. 14, 1915 Ser. No. 2097 Pat'd No.
 Division of Application No. 541,428, filed Feb. 2, 1910
 Attorney Brown, Nissen & Sprinkle of 312 So. Dearborn St.,
 Associate Att'y of Chicago, Ill.
 Assignee of
 *((1) 2.) Name (2) John Lewis Milton
 Post-office address c/o Webster Electric Company, Tiffin, Ohio
 Title Magneto-Generator
 Filed Oct. 28, 1910 Ser. No. 589,564 Pat'd May 12, 1914 No.
 1,096,048
 Attorney Lynn A. Williams of Monadnock Block, Chicago, Ill.
 Associate Att'y of
 Assignee of
 (Rubber stamp) Intf. Number 39013 Intf. Declared Aug.
 24 1915 Statements Due Sep 27 1915

3. Name

Post-office address

Title

| Filed | Ser. No. | Pat'd | No. |
|-----------------|----------|-------|-----|
| Attorney | | of | |
| Associate Att'y | | of | |
| Assignee | | of | |

*Matter in italics in parentheses, stricken out in original transcript.

INVENTION.

Count 1. In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the

39013—1

27829b5m3-07

(Endorsed) Nov 7 1918

574

352

—2—

(Ex. of Interferences).

diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

Count 2. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm as-

sociated with the yoke, and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

Count 3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

Count 4. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the op-

39013—2

(Endorsed) Nov 7 1918

575

353

—3—

(Ex. of Interferences).

erating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

Count 5. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to engage the end of the

inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and an impact member fixed relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

Count 6. In a device of the class described, a field magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the field magnet, a yoke mounted upon said shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an ignition spark in the combustion chamber of the engine.

The relation of the counts of the interference to the claims of the respective parties is as follows:

| Counts: | Kane: | Milton: |
|---------|-------|---------|
| 1 | 1 | 1 |
| 2 | 2 | 2 |
| 3 | 3 | 3 |
| 4 | 4 | 4 |
| 5 | 5 | 5 |
| 6 | 6 | 6 |

COUNTS COMPARED.

HHG

39013—3

(Endorsed) Nov 7 1918

A. R. BENSON

Examiner.

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 3

DEPARTMENT OF THE INTERIOR

United States Patent Office

LBF

Washington, D. C.

September 14 1915.

(Rubber Stamp) U. S. Patent Office, Interference Division
 Sep 14 1915 Mailed
 In Re Interference No. 39013.

Milton
 v.
 Kane.

133

} Before the Examiner of
 Interferences.

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

THOMAS EWING

6 1652

Commissioner of Patents.

The notice of declaration of this interference which was sent to the patentee, John Lewis Milton, at his address of record, care of Webster Electric Company, Tiffin, Ohio, by registered mail, has been returned by the post office as undeliverable.

The attorney for Milton is accordingly requested to furnish the Office within fifteen days with the present address of this party in order that the aforesaid notice may be forwarded in accordance with the rules.

H. E. STAUFFER

Examiner of Interferences.

39013-4

(Endorsed) Nov 7 1918

577

39,013—4

(Rubber Stamps) Docket Clerk Sep 3 1915 Doc
Sep 6 1915 U. S. Patent Office Mail Room

IN THE UNITED STATES PATENT OFFICE.

| | | |
|---|---|--|
| Re Interference No. 39,013 | } | Before the Examiner of Interferences. |
| between | | |
| Edward Joseph Kane | | |
| and John Lewis Milton, Electric Igniters. | | |

Hold

STIPULATION.

F It is hereby stipulated by and between counsel for the
respective parties, that the time as fixed in the Office Ac-
tion of August 24, 1915, for filing the statements under
S Rule 110 in this case, be extended ten (10) days; namely,
that said statements may be filed on or before October 7,
1915.

BROWN, NISSEN & SPRINKLER,
Attorneys for Kane.
LYNN A. WILLIAMS,
Attorney for Milton

Chicago, Illinois,
August 31, 1915.
39013—4
(Endorsed) Nov 7 1918

368

Defendants' Exhibit No. 49.

578

2— 4

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 5.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington, D. C.

JHD

Sept. 17, 1915.

(Rubber Stamp) U. S. Patent Office, Interference Division,
Sep 17 1915 Mailed
In Re Interference No. 39013.

Milton
v.
Kane.

234

} Before the Examiner of
Interferences.

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case
Very respectfully.

THOMAS EWING

6 1652

Commissioner of Patents.

The stipulation filed Sept. 3, 1915, is approved, and in accordance therewith the time for filing statements in this case is extended to October 7, 1915.

LOUIS E. GILES

Acting Examiner of Interferences.

39013—5

(Endorsed) Nov 7 1918

579

39,013—6
Doc

Telephone Harrison { 3634
 3638

Williams & Bradbury
Attorneys and Counselors
in
Patent and Trade Mark Causes
719-722 Monadnock Block
Chicago

Lynn A. Williams
Clifford C. Bradbury
Albert G. McCaleb
Robert F. Bracke

(Rubber stamps) Docket Clerk Oct 1 1915 U. S. Patent
Office Mail Room Oct 1 1915 U. S. Patent Office
September 27, 1915.

Hon. Commissioner of Patents,
Washington, D. C.

In re Interference No. 39,013,
Milton vs. Kane.

Sir:

In response to Office Letter, dated September 14, 1915, attorney for the party Milton states that he believes the present address of the party Milton to be, c/o Motor Ignition & Devices Company, 40 E. LaFayette St., Detroit, Michigan.

Respectfully,

LYNN A. WILLIAMS

39013—6

(Endorsed) Nov 7 1918

Room No. 261.
Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 7.

DEPARTMENT OF THE INTERIOR

United States Patent Office

IAW

Washington, D. C.

October 2, 1915.

| | | |
|-------------------------------|---|---------------------------------------|
| In re Interference No. 39013. | } | Before the Examiner of Interferences. |
| Milton 115 | | |
| v. | | |
| Kane. | | |

(Rubber stamp) U. S. Patent Office Interference Division
Oct 2 1915 Mailed

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

THOMAS EWING
Commissioner of Patents.

6 1652

The copy of the declaration of interference addressed to Milton, the patentee, c/o Webster Electric Company, Tiffin, Ohio, which was returned by the post office undelivered, is hereby remailed to said Milton c/o Motor Ignition & Devices Company, 40 E. LaFayette St., Detroit, Mich.

H. E. STAUFFER
Examiner of Interferences.

39013-8

(Endorsed) Nov 7 1918

581

39013—8

Statement of Kane

F Oct. 6 15

Approved Dec. 17 15

IN THE UNITED STATES PATENT OFFICE

F.

Re Interference No. 39,013

Milton

v.
Kane

} Before the
Examiner of Interferences.

PRELIMINARY STATEMENT OF E. J. KANE.

Edmund Joseph Kane, being duly sworn, deposes and says that he is a party to the above entitled interference;
 ✓ that he conceived the invention contained in the claims of his application declared to be involved in this interference on or about Feb. 1, 1909; that on April 11, 1909,
 ✓ he made a sketch of said invention, and that other sketches of the invention were made on subsequent dates; that on April 14, 1909, he completed detail working drawings of said invention; that on or about April 11, 1909, he
 ✓ first explained his said invention to others; that on or about April 14, 1909, he began to build a full-sized device embodying his invention, and that said full-sized
 ✓ device was completed and placed in use and successfully operated on or about May 1, 1909; that in July and August 1909 about ten more devices embodying the invention were completed and operated; that since the first said device was completed and successfully operated, more
 ✓ than fifty thousand devices embodying his said invention have been manufactured and sold and are in successful commercial use; and that the demand commercially for his said invention is increasing very rapidly.

Further deponent saith not.

EDMUND JOSEPH KANE.

Subscribed and sworn to before me this 4th day of October 1915.

THOMAS COLSON

Notary Public

9013—9

(Endorsed) Nov 7 1918

372

Defendants' Exhibit No. 49.

582

2—207

#9

Address only
The Commissioner of Patents,
Washington, D. C.

R. R. M.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington, D. C.

Oct. 7, 1915

| | | |
|--------------------------------------|---|--|
| In the Matter of the Interference of | } | Before the Examiner of Interferences Intf. No. 39013 |
| Milton | | |
| <i>vs</i> | | |
| Kane | | |

Sir:

You are hereby informed that the preliminary statement of Kane has been received and filed.

By direction of the Commissioner:

Very respectfully,

W. F. WOOLARD,
Chief Clerk.

BROWN, NISSON & SPRINKLE
312 S. Dearborn St
Chicago, Ill.

6—2051

39013—10

(Endorsed) Nov 7 1918

583

39,013—10
Doc

(Rubber stamps) Mail Room Oct 7 1915 U. S. Patent Office
Docket Clerk Oct 7 1915 U. S. Patent Office

IN THE UNITED STATES PATENT OFFICE

Re Interference No. 39,013

between

Edward Joseph Kane

and

John Lewis Milton,

Electric Igniters.

} Before the
Examiner of Interferences.

S

STIPULATION.

It is hereby stipulated by and between counsel for the respective parties, that the time as fixed in the Office Action of September 17, 1915, for filing the statements under Rule 110 in this case be extended ten (10) days; namely, that said statements may be filed on or before October 17, 1915, it being agreed that Kane's statement shall not be opened or made accessible to Milton prior to October 17, 1915.

LYNN A. WILLIAMS

Attorney for Milton.

BROWN, NISSEN & SPRINKLE

Attorneys for Kane.

Chicago, Illinois,

October 5, 1915.

39013—11

(Endorsed) Nov 7 1918

584

585

374

Defendants' Exhibit No. 49.

586

2—224

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 12.

DEPARTMENT OF THE INTERIOR

United States Patent Office

LBF

Washington, D. C.

October 11, 1915.

(Rubber stamp) U. S. Patent Office Interference Division
Oct 11 1916 Mailed

In Re Interference No. 39013. }

Milton

v.

Kane.

} Before the Examiner of
Interferences.

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

THOMAS EWING

6 1652

Commissioner of Patents.

The stipulation filed October 7, 1915, is approved and in accordance therewith the time within which preliminary statements may be filed in this case is hereby extended to October 18, 1915.

H. E. STAUFFER

Examiner of Interferences.

39013—14

(Endorsed) Nov 7 1918

587

39,013—13
Doc.

(Rubber stamps) Docket Clerk October 18 1915 U. S. Patent Office Mail Room Oct 18 1915 U. S. Patent Office

IN THE UNITED STATES PATENT OFFICE

Re Interference No. 39,013
between
John Lewis Milton
and
Edward Joseph Kane,
Electric Igniters

} Before the
Examiner of Interferences.

STIPULATION

It is hereby stipulated by and between counsel for the respective parties, that the time as fixed in the Office Action of October 11, 1915, for filing the statements under Rule 110 in this case be extended ten (10) days, namely, that said statements may be filed on or before October 28, 1915, it being agreed that Kane's statement shall not be opened or made accessible to Milton prior to October 28, 1915.

LYNN A. WILLIAMS

Attorney for Milton.

BROWNE NISSEN & SPRINKLE

Attorneys for Kane.

Chicago, Illinois,
October 16, 1915.
39013—15

(Endorsed) Nov 7 1918

376

Defendants' Exhibit No. 49.

588

2— 4

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 14

DEPARTMENT OF THE INTERIOR

United States Patent Office

IAW

Washington, D. C.

October 18, 1915.

| | | |
|-------------------------------|---|---------------------------------------|
| In Re Interference No. 39013. | } | Before the Examiner of Interferences. |
| Milton 456 | | |
| v. | | |
| Kane. | | |

(Rubber stamp) U. S. Patent Office, Interference Division
Oct 18 1915 Mailed

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

6—1652

THOMAS EWING
Commissioner of Patents.

In view of the probable declaration of an additional interference involving the application of Kane, the time for filing preliminary statements herein is further extended to and including November 8, 1915. No action based on the stipulation filed October 18, 1915, is therefore necessary, and the same is hereby dismissed.

H. E. STAUFFER
Examiner of Interferences

39013—16

(Endorsed) Nov 7 1918

589

(Rubber stamps) Docket Clerk Nov 2 1915 U. S. Pat-
ent Office. Mail Room Nov 1 1915 U. S. Patent Office

39,013—15

IN THE UNITED STATES PATENT OFFICE.

In Re Interference No. 39,013 }
 between
 John Lewis Milton
 and
 Edmund Joseph Kane
 Electric Igniters. }

Before the
Examiner of Interferences

PETITION.

And now comes the applicant, Edmund Joseph Kane, by his attorneys, and requests that the order of October 18, 1915, be enlarged so that the time for filing preliminary statements in interference No. 39,013 shall be extended to and including November 29, 1915, which is the date now fixed as the limit for filing preliminary statements in interference No. 39,181, involving the said application of Kane and patent re-issue No. 13,878, reissued February 19, 1915, to Emil Podlesak, of Racine, Wisconsin. This request is made for reasons heretofore set forth in applicant's petitions of September 1, 1915, and October 4, 1915 (Chicago dates). Briefly stated, applicant's reasons for desiring the extension of time in interference with Milton is that the two interferences involve analogous subject matter, and are both based upon the disclosure in the Kane application. The record shows that the attorney for Kane and Milton is the same, and

Podlesak?

the real party in interest is the Webster Electric Company, the assignee and licensee of the Milton

39013—17

(Endorsed) Nov 7 1918

590

and Podlesak patents respectively. It is therefore desired that the preliminary statements in both interferences should be opened on the same date, as the opening of Kane's preliminary statement in

either of the interferences would have the effect of disclosing Kane's dates of conception, reduction to practice, etc., to one of the parties before he is entitled to such information. Kane's preliminary statement in the Milton interference is already on file.

Respectfully submitted,
BROWN NISSEN & SPRINKLE
Attorneys for Applicant.

Chicago, Illinois,
October 28, 1915.

39013—18

(Endorsed) Nov 7 1918

591

2— 4

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 16.

DEPARTMENT OF THE INTERIOR

United States Patent Office

GML

Washington, D. C.

November 3, 1915

In Re Interference No. 39013.

Milton 396

v.

Kane.

} Before the Examiner of
Interferences.

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

THOMAS EWING

6—1652

Commissioner of Patents.

This case is before me on petition by Kane filed November 1, 1915, to extend the time for filing preliminary statements to November 29, 1915. The time is now fixed for November 8, 1915. In support of the petition it is pointed out that preliminary statements in a companion case are due on November

29, 1915. Inasmuch as the practice is to open statements in all cases of a series at the same time, the petition is granted and the time for filing statements is hereby extended and fixed to expire November 29, 1915.

H. E. STAUFFER
Examiner of Interferences.

39013—19
(Endorsed) Nov 7 1918

592

39013—17
Statement of Milton
Filed Nov. 8 1915
Approved Dec. 17 1915

IN THE UNITED STATES PATENT OFFICE. F.

| | | |
|---|---|--|
| Re Interference No. 39,013 | } | Before the Examiner of Interferences. |
| between | | |
| John Lewis Milton | | |
| and Edward Joseph Kane, Electric Igniters | | |

PRELIMINARY STATEMENT OF JOHN L. MILTON.

State of Michigan, }
County of Wayne, } ss.

JOHN L. MILTON, of Detroit, in the County of Wayne and State of Michigan, being duly sworn, deposes and says:

I am a party to the interference declared by the Commissioner of Patents on August 24, 1915 between Letters Patent No. 1,096,048, issued to me on May 12, 1914 and an application for Letters Patent said to have been filed by Edmund J. Kane; to the best of my knowledge and belief that I conceived the invention set forth in the declaration of interference on or about the 15th day of August, 1908; that on or about the 15th day of August, 1908, I first made drawings of the invention; that on or about the 15th day of August, 1908, I first explained the invention to others; that I first reduced the said invention to practice on or about the 24th day of September,

- ✓ 1908; that the said invention has gone into wide and extensive commercial use; and that I filed an application for British Letters Patent covering the same invention upon
✓ the 28th day of October, 1909, which said application was given No. 24,838, of 1909.

That some years ago I had delivered to the * (*residence*)
business place

39013—20

JNO. L. MILTON

(Endorsed) Nov 7 1918

592a of my brother-in-law in Louisville, Kentucky, for storage by him a large quantity of accumulated papers, documents and other personal effects; that I have endeavored by correspondence with my brother-in-law to have sent to me at Detroit, Michigan, any and all of my papers relating to the invention of the subject-matter of the above entitled interference; that the papers and documents thus far sent me have not borne upon the subject-matter of this interference; that I believe there are among the said personal effects certain papers relating to the history of my invention of the subject-matter of this interference; that in order to locate the said papers among the several boxes of papers thus stored, it will be necessary for me to make a trip to Louisville, Kentucky, which my health and business engagements will not at this time permit.

JOHN LEWIS MILTON.

Subscribed and sworn to before me this 6th day of November, A. D. 1915.

ELIZABETH A. HEMPLEY

Notary Public, Wayne Co., Mich.

My commission expires March 24, 1918.

39013—21

(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

593

2—207

#18

Address only
The Commissioner of Patents, RRM
Washington, D. C.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington, D. C.

Nov. 9, 1915,

In the Matter of the Interference of } Before the Examiner
Milton *vs.* Kane, } Interferences.
Intf. No. 39013

Sir:

You are hereby informed that the preliminary statement of Milton has been received and filed.

By direction of the Commissioner:

Very respectfully,

W. F. WOOLARD,
Chief Clerk.

LYNN A. WILLIAMS,
Monadnock Block,
Chicago, Ill.

6—2051

39013—22

(Endorsed) Nov 7 1918

(Rubber stamp) Docket Clerk Nov 30 1915 U. S. Patent Office

UNITED STATES PATENT OFFICE

John L. Milton
vs.
Edmund Joseph Kane } Interference No. 39,013.

STIPULATION

S It is hereby stipulated and agreed by and between counsel for the parties hereto that the preliminary statements heretofore filed herein shall not be made accessible to the parties until the preliminary statements in companion Interference No. 39,181, Podlesak vs. Kane, are opened. Counsel for the parties to this interference are also counsel for the parties Podlesak and Kane in Interference No. 39,181, in which last-mentioned interference counsel have this day stipulated that the preliminary statements shall not be opened until December 9, 1915, in order to give the party Podlesak time in which to file his statement.

LYNN A. WILLIAMS,
Attorney for Milton
BROWN NISSEN & SPRINKLE
Attorneys for Kane.

Chicago,
November 29, 1915.
39013—23

(Endorsed) Nov 7 1918

595

2-224

Room No. 261.
Address only "The Commis-
sioner of Patents, Wash-
ington, D. C.," and not
any official by name.

Paper No. 20

DEPARTMENT OF THE INTERIOR

United States Patent Office

LBF

Washington, D. C.

December 2, 1915.

(Rubber Stamp) U. S. Patent Office Interference Division
Dec 2 1915 Mailed

In Re Interference No. 39013. }
Milton } Before the Examiner of
v. } Interferences.
Kane.

Please find below a communication from the Examiner in
charge of Interferences in regard to the above-cited case.
Very respectfully,

6-1652

THOMAS EWING
Commissioner of Patents.

The receipt of the stipulation filed herein November 30,
1915, is hereby acknowledged and in accordance with the pro-
visions thereof the statements of the respective parties will
not be opened to inspection until the statements in interfer-
ence No. 39181 are opened. This is in accordance with the
established practice.

H. E. STAUFFER
Examiner of Interferences

39013-24

(Endorsed) Nov 7 1918

Room No. 261.

Address only

The Commissioner of Patents,
Washington, D. C.

Paper No. 21.

DEPARTMENT OF THE INTERIOR

United States Patent Office

LBF

Washington

December 17, 1915.

In Re Interference No. 39013.

Milton

130

v.

Kane.

} Before the Examiner of
Interferences.

Please find below a communication from the Examiner in
charge of Interferences in regard to the above-entitled case.

Very respectfully,

THOMAS EWING

Commissioner of Patents.

The parties to the above-entitled interference are hereby
notified that their preliminary statements are approved, and
that testimony must be taken, forwarded, and printed in ac-
cordance with the published Rules of Practice of the office.

The dates of filing and the Serial numbers of the applica-
tions are given, and the times for taking testimony and for
final hearing are set as follows:

6—2411

No testimony to be taken within thirty days.

John Lewis Milton filed Oct. 28, 1910, Ser. No. 589,564,
patented May 12, 1914, No. 1,096,048.

Testimony in chief to close Mar. 18, 1916.

Edmund Joseph Kane filed Jan. 14, 1915, Ser. No.
2,097, division of Ser. No. 541,428, filed Feb. 2,
1910.

Testimony to close Apr. 18, 1916.

Rebuttal testimony of Milton to close May 3, 1916.

Final hearing July 5, 1916, at 11 A. M.

H. E. STAUFFER

Examiner of Interferences.

39013—25

(Endorsed) Nov 7 1918

597

#22

Telephones Harrison } 3634
 } 3638

Williams & Bradbury
Attorneys and Counselors
in
Patent and Trade Mark Causes
719-722 Monadnock Block
Chicago

Lynn A. Williams
Clifford C. Bradbury
Albert G. McCaleb
Robert F. Bracke

(Rubber stamp) Docket Clerk Jan 8 1916 U. S. Patent
Office.

January 6, 1916.

Commissioner of Patents,
Washington, D. C.
Sir:

Kindly permit the Misses A. M. & E. H. Parkins of the Washington Loan & Trust Building, Washington, D. C., to examine the file wrappers of application of Edmund Joseph Kane, Serial No. 541,428 and Serial No. 2,097, filed respectively on February 2, 1910 and January 14, 1915. Kane's application No. 2,097 is a division of application Serial No. 541,428, which is involved in interference No. 39,013, Milton vs. Kane. I am attorney of record for the party John L. Milton.

Very truly yours,

LYNN A. WILLIAMS.

39013—26

(Endorsed) Nov 7 1918

(Rubber stamps) Docket Clerk Feb 14 1916 U. S. Patent
Office Mail Room Feb 1916 U. S. Patent Office

IN THE UNITED STATES PATENT OFFICE.

| | | |
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| John L. Milton | } | Examiner of Interferences. Interference No. 39,103. |
| —v— | | |
| Edmund Joseph Kane. | | |
| Before the | | |

BRIEF IN OPPOSITION TO MOTION OF THE PARTY
MILTON TO SHIFT THE BURDEN OF PROOF.

The Commissioner of Patents,
Washington, D. C.
Sir:—

In response to the motion to shift the burden of proof, notice of the hearing of which on Tuesday, February 15, 1916, at 11:00 o'clock a. m., has been received, the party Kane asserts that the motion should be denied for the following reasons:

The Alleged British Patent to Milton Not Proven As
Required by Law.

Accompany the motion of Milton's attorney to shift the burden of proof in the above entitled interference, is an al-
39013—27

(Endorsed) Nov 7 1918

599 leged certified copy of a British patent bearing the name of one Milton and purporting to have been filed in the British Patent Office on the 28th day of October, 1909. Whether or not the Examiner of Interferences would be warranted in shifting the burden of proof in this interference on account of the showing thus made by Milton should, we believe, be very seriously questioned by the Honorable Examiner before he enters such an order. There is an affidavit of the inventor Kane on file, which was sworn to before a notary public in Chicago on the 3rd day of September, 1915, and was forwarded from Chicago to the Patent Office on September 4, 1915 and probably bears a filing date in the Patent Office within two or three days after the last mentioned date. This affidavit sets forth the sworn statement of Kane that

he disclosed his invention to John L. Milton "long before either Milton or Podlesak made application for their above mentioned patents (Nos. 1,096,048 and Reissue 13,878, respectively), and while said Milton and Podlesak were in the employment of the Webster Electric Company, in the experimental department thereof, in an endeavor to interest the Webster Electric Company in affiant's invention." It must be evident to the Examiner, from this sworn statement of Kane, that he will offer evidence that John L. Milton was not
39013—28

(Endorsed) Nov 7 1918 .. 2 ..

600 the inventor of any part of the subject-matter claimed in the Milton patent No. 1,096,048, and that he was not the inventor of the same subject-matter shown in the alleged British application and patent.

If the invention disclosed in the copy of specification and the drawing accompanying the alleged certificate from the comptroller general of patents, designs and trade-marks which accompanies the motion in behalf of Milton, could be shown by anything accompanying these papers of evidential value, to be the invention of John L. Milton, then the Examiner of Interferences might be warranted in considering this application to shift the burden of proof to rest upon the party Kane. We submit that Milton has failed to make any such showing as required by the statutes, the Patent Office Rules and the practice of the Office. The affidavit of Albert G. McCaleb, an associate of Attorney Lynn A. Williams, asserts nothing of evidential value except that certain papers referred to in his affidavit were received through the mails. Attached to a typewritten copy of an alleged specification and a photographic copy of a drawing, is a certificate attesting to the truth of these copies by an alleged comptroller general of patents from the Patent Office, London. There is
39013—29

(Endorsed) Nov 7 1918 .. 3 ..

601 nothing, however, submitted by which the Commissioner of Patents can determine whether these papers were in fact made by the proper officials of the British Patent Office or whether they are spurious. It would have been a comparatively easy matter for Milton to submit duly certified

copies of his application properly authenticated. The decision of the Commissioner in *Lauder v. Crowell*, 16 O. G., 405, makes it perfectly clear that the United States Patent Office cannot take cognizance of papers offered as evidence in the manner of the papers accompanying this motion. These papers were not delivered by the British Government to the Government of the United States in order to render them competent evidence in the United States, even if they were competent in England, as laid down in this decision. The Commissioner of Patents in the above mentioned decision, quoting from the decision of the Supreme Court of the United States in *Ennis v. Smith*, 11 How. 400, laid down the rule, which must be followed by the courts in receiving papers from foreign governments, in the following language:

"It may be verified by an oath, or by an exemplification of a copy under the great seal of a State, or by a copy proved to be a true copy by a witness who has examined and compared it with the original, or by a certificate of an officer properly authorized by law to give the copy which certificate must be duly proved."

39013—30

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(Endorsed) Nov 7 1918

602 Has the certificate accompanying the typewritten specification, claims and drawing relied upon in this motion, been duly proved? We assert it has not. There is not one word of proof to show that the party who signed the certificate attached to said papers accompanying the motion was or is, in fact, the Comptroller General of Patents. It would have been a comparatively easy matter for Milton to have had a United States Consular Officer in London attest to the authority of this officer, and the Office of the Secretary of State of the United States at Washington could easily have affixed a certificate showing the proper authority of such Consular Officer. This, however, has not been done, and the alleged British patent application therefore, we submit, is not properly proved and cannot be relied upon by Milton in this motion.

No Proof That Milton Is the Inventor of Any Part of the Disclosure of the British Application.

It is submitted that the Honorable Commissioner cannot properly take cognizance of the papers accompanying the motion, because there is not a word of proof accompanying the

same to show that Milton was the inventor of any part of the disclosure, nor does the printed document on which Milton relies and which contains the complete specification and draw-
39013—31 .. 5 ..

(Endorsed) Nov 7 1918

603 ings contain either the petition or declaration. In the language of the Commissioner of Patents in the above cited decision, therefore, like the printed document on which the party Hedderwick relied in that early case,—“It fails to show whether he is a mere importer or an actual inventor.” Assuming that the alleged certified application was properly proven and authenticated, which we have shown it is not, it then would not constitute *prima facie* proof that Milton is an original inventor of the device in question, for as the Commissioner of Patents stated in the *Lauder v. Crowell* decision,—

“It does not *prima facie* import invention in the sense of the American law, because under the English law it is immaterial whether the applicant for an English patent is himself the inventor or is only the importer of another's invention.”

The stipulation then is that in England the papers accompanying this motion, even though proven to have been issued by and under the seal of the British Patent Office, would not prove Milton to have been the inventor of what is disclosed therein, for the reason that the papers contain no declaration or oath to the fact that he was the inventor of any part of what is disclosed therein. It is well known that in England Milton could file this application as a communication—
39013—32 .. 6 ..

(Endorsed) Nov 7 1918

604 tion or as an importer of the invention into the realm without having anything whatever to do with making the invention at this time, and even though Kane was and is, as he has sworn and we maintain, the original inventor, if the papers referred to were duly authenticated, yet they could not be used as evidence to show Milton an inventor in England; how, then, can such papers have any evidential value in carrying Milton's date of invention ahead of his filing date in the United States? Or, in other words, must the United States Patent Office accept such papers, unauthenticated and unsupported by any oath whatever, just because the British

Government happens to have granted a patent to one Milton who afterwards made oath in the United States to the fact that the invention had been patented abroad?

In the absence of any oath, therefore, accompanying the alleged certified papers on which reliance is made in support of this motion, it is submitted that Milton cannot set up a proven date of invention to the subject-matter described and claimed in his patent earlier than his filing date in the United States, which was on the 28th day of October, 1910, or on the anniversary of the filing date of the alleged British patent application. While his filing of his United States application in interference may have been technically within the one year allowed by the statutes, there may be a question
39013—33 .. 7 ..

(Endorsed) Nov 7 1918

605 whether the filing of the application is within the spirit of the statute, and under some decisions he might be held to have filed a day too late, in order to avail himself at all of the British application, even though he had made oath to being the inventor of the subject-matter disclosed in the British application, which he has not proven here, and even though the application set up in support of the motion were duly authenticated, which we have shown is not the case. The question must arise at once in the mind of this Tribunal, why John Lewis Milton should file a communication from the United States of America, over his signature, without any verified petition, declaration or oath, and why he should, on in the United States the anniversary of such filing, file an application [^] for patent describing the same and claiming portions of the disclosure of such British specification.

It is further submitted that the United States Patent Office cannot grant this motion on the faulty showing of this alleged British Patent, because it is otherwise fatally defective, containing no copy of the grant (see *Rousseau v. Brown*, C. A. D. C., 104 O. G., 1120).

In view of the above stated reasons, we submit the motion to shift the burden of proof should be denied.

Respectfully submitted,

BROWN NISSEN & SPRINKLE

Attorneys for Edmund Joseph Kane.

Chicago,
February 12, 1916.

39013—34

.. 8 ..

(Endorsed) Nov 7 1918

606

(Rubber stamp) Docket Clerk Feb 15 1916 U. S. Patent Office

39,013—24

UNITED STATES PATENT OFFICE

John L. Milton
vs.
Edmund Joseph Kane } Interference No. 39,013.

Before the Honorable Examiner-of-Interferences.
Messrs. Brown, Nissen & Sprinkle,
Attorneys for Kane,
Monadnock Block,
Chicago, Illinois.
Gentlemen:

Tuesday

15

Please take notice that on **(Monday)*, February **(14)*, 1916, at 11 o'clock a. m., or as soon thereafter as counsel can be heard, we shall appear before the Honorable Examiner-of-Interferences in the United States Patent Office at Washington, D. C., and present the attached motion to shift the burden of proof in the above-entitled interference. Attached hereto and forming a part of this notice please find a duplicate of the certified copy of Milton's British patent application No. 24,838 of 1909, filed on October 28, 1909; also a copy of an affidavit of Albert G. McCaleb which we shall file in support of our aforesaid motion to shift the burden of proof.

Respectfully,

LYNN A. WILLIAMS
Attorney for Milton.

Due service of the above notice is hereby acknowledged this 8th day of February, 1916.

BROWN NISSEN & SPRINKLE
Attorneys for Kane.

013—35

(Endorsed) Nov 7 1918

**Matter in italics in parentheses, stricken out in original transcript.*

John L. Milton
vs.
Edmund Joseph Kane } Interference No. 39,013.

Before the Honorable Examiner-
of-Interferences.

MOTION

And now comes the party, John L. Milton, by his attorney, and moves that the burden of proof in the above-entitled interference be shifted to rest upon the party Edmund Joseph Kane. This motion is based upon the record herein, the attached certified copy of Milton's British patent No. 24,838 of 1909, filed in the British Patent Office on October 28, 1909, the accompanying affidavit of Albert G. McCaleb, and the statutes, conventions and Patent Office rules in such cases made and provided.

LYNN A. WILLIAMS,
Attorney for Milton.

39013--36

(Endorsed) Nov 7 1918

608 (Rubber stamp) Dock Clerk Feb 15 1916 U. S. Patent
Office.

UNITED STATES PATENT OFFICE

| | | |
|--------------------|---|--------------------------------|
| John L. Milton | } | Interference No. 39,013. |
| <i>vs.</i> | | Before the Honorable Examiner- |
| Edmund Joseph Kane | | of-Interferences. |

AFFIDAVIT OF ALBERT G. McCALEB.

County of Cook. }
State of Illinois, } ss:

ALBERT G. McCALEB, being first duly sworn, on oath de-
poses and says:

I am a registered patent attorney; am associated with Lynn A. Williams, Esq., attorney of record for John L. Milton, one of the parties to the above-entitled interference. I am familiar with all of the proceedings heretofore had in the above-entitled interference, and am familiar with the subject-matter thereof. I am making this affidavit in support of Milton's motion to shift the burden of proof in the above-entitled interference.

This interference, which was declared on August 24, 1915, involves patent No. 1,096,048, granted to John L. Milton on May 12, 1914, as a result of an application for patent filed 9013—37

(Endorsed) Nov 7 1918

609 in the United States Patent Office on October 28, 1910.

The party Kane is an applicant. Although Milton's application was filed in the United States Patent Office on October 28, 1910, Milton, in his Oath accompanying the United States application, alleged that one year previously, to-wit, on October 28, 1909, he had applied for a patent in England covering the same subject-matter.

The preliminary statements in the above-entitled interference were opened on or about the 17th of December, last, and a few days thereafter in the regular course of business we, as

attorneys for Milton, received a notice from the Patent Office to the effect that the Kane application in interference was filed on January 14, 1915, the same purporting to be a division of an earlier application filed February 2, 1910. Kane was given the benefit of his earlier filing date, and the Examiner-of-Interferences, in setting times for taking testimony, etc., in accordance with the usual practice, made Milton the junior party, inasmuch as Milton's United States application was filed on October 28, 1910—a little over eight months after the filing date of Kane's earlier application aforesaid.

After receiving the Patent Office letter of December 17, 1915, setting times for taking testimony, etc., we exchanged copies of preliminary statements with Messrs. Brown, Nissen & Sprinkle, attorneys for Kane, and I took up with Messrs. Brown, Nissen & Sprinkle the matter of exchanging file-wrapper contents. On December 31, 1915, we received a letter from Messrs. Brown, Nissen & Sprinkle advising, in sub-9013—38

—2—

(Endorsed) Nov 7 1918

610 stance, that in view of the circumstances Kane's attorneys could not exchange copies of file-wrapper contents, but offering a stipulate an extension in the time for making motions under Rule 122. A copy of this letter from Messrs. Brown, Nissen & Sprinkle is hereunto attached and marked "Exhibit A, Albert G. McCaleb Affidavit." After the receipt of the letter aforesaid we ordered copies of the file-wrappers of Kane's two applications involved, which file-wrappers were received by us a short time ago and since which time we have devoted considerable time to the study of Kane's applications with a view to making motions under the provisions of Rule 122.

Shortly after the opening of the preliminary statements aforesaid the attorneys for Milton decided to move to shift the burden of proof in view of Milton's constructive reduction to practice in Great Britain on October 28, 1909, if a study of Kane's file-wrappers should reveal that there exists an interference in fact. Accordingly a search was instituted for a certified copy of Milton's British application, which we were informed, and believe, had been ordered and secured some years ago and before the declaration of the present interference. After considerable search and correspondence with the various interested parties it became necessary to discontinue the search for the certified copy in question and

to order a certified copy of Milton's original application from the British Patent Office. Accordingly we promptly cabled our London Associates to secure the necessary certified copy and mail it immediately. Shortly thereafter we received 39013—39

—3—

(Endorsed) Nov 7 1918

611 an answer to our cablegram, advising that an authorization duly signed by Mr. John L. Milton was necessary in order to secure the certified copy in question. This would indicate that since the war the British government will not issue certified copies of British patent applications without authorization from the applicant even though the patent has been granted on the application, as is the case in the present instance. Immediately upon receipt of the information above-mentioned we prepared the necessary authorization and forwarded the same to Mr. John L. Milton, who was and is located in Detroit, Michigan, instructing him to sign the authorization and forward it directly to our London Associates, Messrs. Dicker, Pollak & Derriman. This was promptly attended to, but it was not until January 20, 1916, that Messrs. Dicker, Pollak & Derriman were able to secure the certified copy and mail the same to us. This last information was obtained by cablegram in response to a cablegram sent to Messrs. Dicker, Pollak & Derriman inquiring when we might expect to receive the certified copy in question. The certified copy of Milton's British patent application No. 24,838 of 1909, attached to the accompanying motion to shift the burden of proof, was received by us yesterday, February 7, 1916, and we are promptly preparing to serve attorneys for the party Kane with a copy of the certified copy aforesaid and with copies of the various papers appertaining to Milton's motion to shift the burden of proof herein.

The drawings forming a part of Milton's British patent application filed on October 28, 1909, as shown by the certified copy before-mentioned, were and are substantially identical with the disclosure of Milton's United States patent.

—4—

(Endorsed) Nov 7 1918

612 tical with the disclosure of Milton's United States patent. The claims in issue are as clearly readable on the disclosure of the British application as they are upon the disclosure of Milton's United States patent, and therefore counsel for Milton are bringing this motion to shift the bur

of proof believing, as we do, that the party Milton is clearly entitled to October 28, 1909, as his date for constructive reduction to practice.

Further affiant saith not.

ALBERT G. McCALEB

Subscribed and sworn to before me this 8th day of February, A. D. 1916.

MARY A. COOK
Notary Public.

39013—41

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(Endorsed) Nov 7 1918

613 EXHIBIT A, ALBERT G. McCALEB AFFIDAVIT.

Law Office of

Brown, Nissen & Sprinkle
1124 Monadnock Building,

Chicago, December 31, 1915.

Mr. Lynn A. Williams,
Seventh Floor Monadnock Block,
Chicago, Illinois.

Dear Sir:

Relative to the conversation we had over the telephone with your Mr. McCaleb and with Mr. Williams, about exchanging files connected with the Milton vs. Kane Interference, we have deferred reporting to you until we could have an opportunity to see Mr. Kane, who has some of the papers in his possession and who has been out of the city. Mr. Kane has now considered this matter with us, and inasmuch as his application which is in the Interference, is a divisional in another application of his, which is now on appeal to the Commissioner from the Board of Examiner-in-Chief, and inasmuch as the files are somewhat voluminous and we have only one copy which is more or less interlined with notations regarding conferences, etc., it seems to Mr. Kane and ourselves, that it would be better for each of us to procure our copies of the records from the Commissioner of Patents.

We would under ordinary circumstances be delighted to extend you the courtesy of examining our files, but, in this case, it seems better that each of us go to the Patent Office for such inspection of files as may be necessary. In taking this stand as Attorneys for Mr. Kane, we do not wish to do

anything that will embarrass you for want of time in making any motions should you deem it advisable to do so within 9013—42

(Endorsed) Nov 7 1918

614 the thirty (30) days as provided under the rules and, therefore, since also some time has elapsed following the opening of the preliminary statements, we wish to say that we will gladly stipulate an extension of such reasonable time as may be required for each of us to get copies of the files from the Commissioner of Patents and we will sign such a stipulation at any time you present it for such reasonable extension, as we know that the Commissioner is frequently behind in filling orders for certified copies of files.

Yours very truly,
(Sgd.) BROWN, NISSEN & SPRINKLE.

ALS-KGS.

39013—43

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(Endorsed) Nov 7 1918

615 Form P. Cert. 1

(Coat of Arms)

PATENTS AND DESIGNS ACT, 1907.

It Is Hereby Certified by the Comptroller-General of Patents, Designs and Trade Marks that the annexed are true copies of the complete specification and drawings as lodged on the 28th October, 1909, in connection with Milton's application for Patent No. 24,838 of 1909, filed on the 28th October, 1909.

This certificate is issued for use in Interference Proceedings in the United States of America. Witness my hand this 20th day of January, 1916.

(Seal)

W. TEMPLE FRANKS
*Comptroller-General of Patents,
Designs and Trade Marks.*

The Patent Office,
25, Southampton Buildings,
London, W. C.

(J 2167—3 a.) Wt. 4051—4072. 2000. 5/15. D & S.

39013—44

(Endorsed) Nov 7 1918

616 24838

28 Oct 1909

PATENTS AND DESIGNS ACT, 1907.

Complete Specification.

"Improvements in and relating to Magneto Generators."

I, John Lewis Milton, of 1075 West 15th Street, Chicago, County Cook, Illinois, United States of America, Electrician, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

39013—45

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(Endorsed) Nov 7 1918

617 This invention relates to magnetic generators and is particularly applicable to that type of magnetic generator which has been, as regards certain features thereof, indicated in my co-pending application for Letters Patent No. 22271/08 and as regards other features thereof will be described in a further application which I am about to file.

The object of the invention is to obtain a cheap and efficient construction, and the present invention deals with the cheapening of construction, more particularly with regard to the operating part of the magneto, and at the same time provides against undue hammering of the contacts.

The invention consists in a construction in a magneto, more especially of the type indicated above, in which an element operating the inductor, acts also as or carries a cam surface whereby the ignition points are allowed suddenly to be broken but slowly to contact, whereby undue hammering of the contacts is obviated, and which also acts as or carries supports for the springs operating the inductor.

The invention also consists in an arrangement whereby unnecessary hammering of the contacts is avoided which consists in throwing the inductor out of action, except during such time as the spark is required to pass for ignition purposes.

The invention also consists in the improvements in and relating to magneto generators referred to hereinafter.

39013—46

—2—

(Endorsed) Nov 7 1918

618 Referring to the accompanying drawings, Figures 1, 2 and 3 represent in plan, elevation, and side elevation respectively one manner of carrying my invention into effect.

Figure 4 shows more particularly a detail view of the operating member which also acts as the cam referred to above and carries the operating springs.

In the form of the invention illustrated a magneto frame of substantially circular contour, for example, as is indicated in my applications for Letters Patent referred to above is denoted as a whole by *a*. It includes two sets of three pole pieces, the middle pole of each being wound for the generation of currents.

The inductor is indicated by *b* and operated by springs, *c*, the magneto being of a reciprocating type.

The construction of magnet frame and inductor and their operation need not be further explained here.

The shaft *d* of the inductor carries thereon an element which is preferably a malleable casting *e*. This has two arms *f*, adapted to hold one end of the springs *c*, the other end being held by bolts *g* in connection with the inductor frame.

The malleable *e* also carries an operating arm *h* which preferably has a hardened face *v*, against which the operating rod *j* contacts.

Further, one of the arms *f* is formed with a cam surface *k*—which in the present form is of circular contour—adapted

39013—47 —3—

(Endorsed) Nov 7 1918

619 to contact with the face *l* of a screw rod *m* as explained below.

In operation the rod *j* engages the face *i* of the arm *h* moves the inductor, subsequently releases it and the springs *c* sharply move it in the proper manner for generating the desired current, as indicated in my applications for Letters Patent, referred to above.

The malleable *e*, however, overruns its normal position, whereupon the cam *k* strikes the surface *l* and opens the contacts *n*, because one of these contacts is situate on an arm *o*, in connection with a rod *p* passing through a sleeve *q* of the rod *p*, also carrying a bracket *q*, which in turn carries the bolt *m*; thus a sudden break is made at the proper time and the desired ignition effected.

After this over-running the surface *l* is kept in contact with the cam surface *k* by means of the light spring *r* whereby the

contacts *m* gradually, but not suddenly approach one another, thus unnecessary hammering is avoided.

Further, to avoid unnecessary hammering and wear of the contacts, I provided on the operating rod *j* a cam piece *s* which by the action of the roller *t* operable from any suitable part of the engine can throw the rod *j* sufficiently high to miss the face *i*, for all strokes except those on which ignition is required.

The roller *t* is mounted eccentrically on the shaft *u* and can be rotated by the arm *v* for the purpose of retarding the ignition at starting and advancing it when running.

39013—48

—4—

(Endorsed) Nov 7 1918

620 It may be noted that the whole construction may be applied to a cylinder in place of a sparking plug, where such is now used, by withdrawing the sparking plug setting and bolting the entire arrangement by two bolts passing through the holes *w*.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed I declare that what I claim is:—

1. In a magneto generator an arrangement for allowing the spark contacts slowly to be approached and quickly to be separated; substantially as and for the purpose described.

2. In a magneto generator and element connected with the inductor and carrying an arm for operating purposes, a cam surface for the purpose referred to in claim 1 and supports for the operating springs; substantially as described.

3. In a magneto generator an element operating the inductor which acts also as or carries a cam surface whereby the ignition points are allowed suddenly to be broken, but slowly to contact whereby undue hammering of the contacts is obviated, and which also acts as or carries supports for the springs operating the inductor; substantially as described.

4. In a magnetic generator an arrangement whereby unnecessary hammering of the contacts is avoided, which consists in throwing the inductor operator out of action except during such time as the spark is required to pass for ignition

39013—49

—5—

(Endorsed) Nov 7 1918

621 purposes; substantially as described.

5. The improvements in and relating to magneto gen-

erators herein referred to with reference to the accompanying drawings.

Dated this 28th day of October 1909.

MARKS & CLERK,
57 & 58, Lincoln's Inn Fields,
London, W. C.
13, Temple Street,
Birmingham, and
25, Market Street,
Manchester,

Agents.

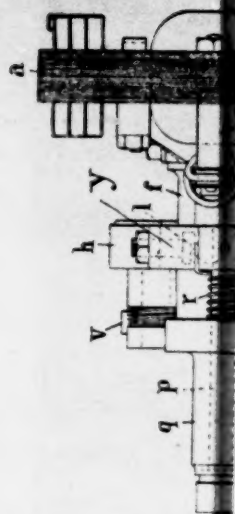
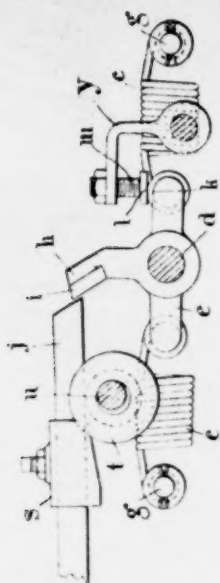
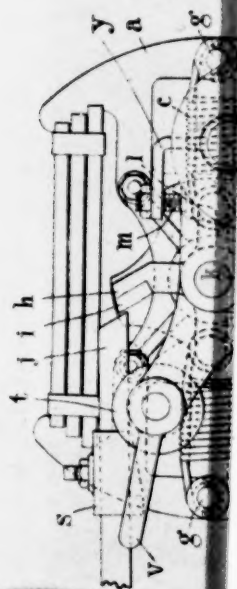
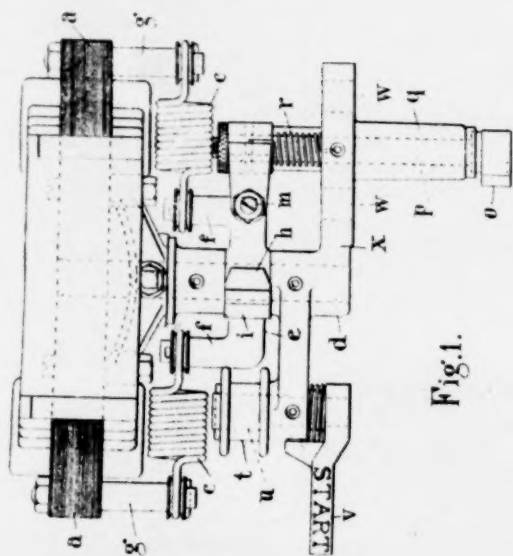
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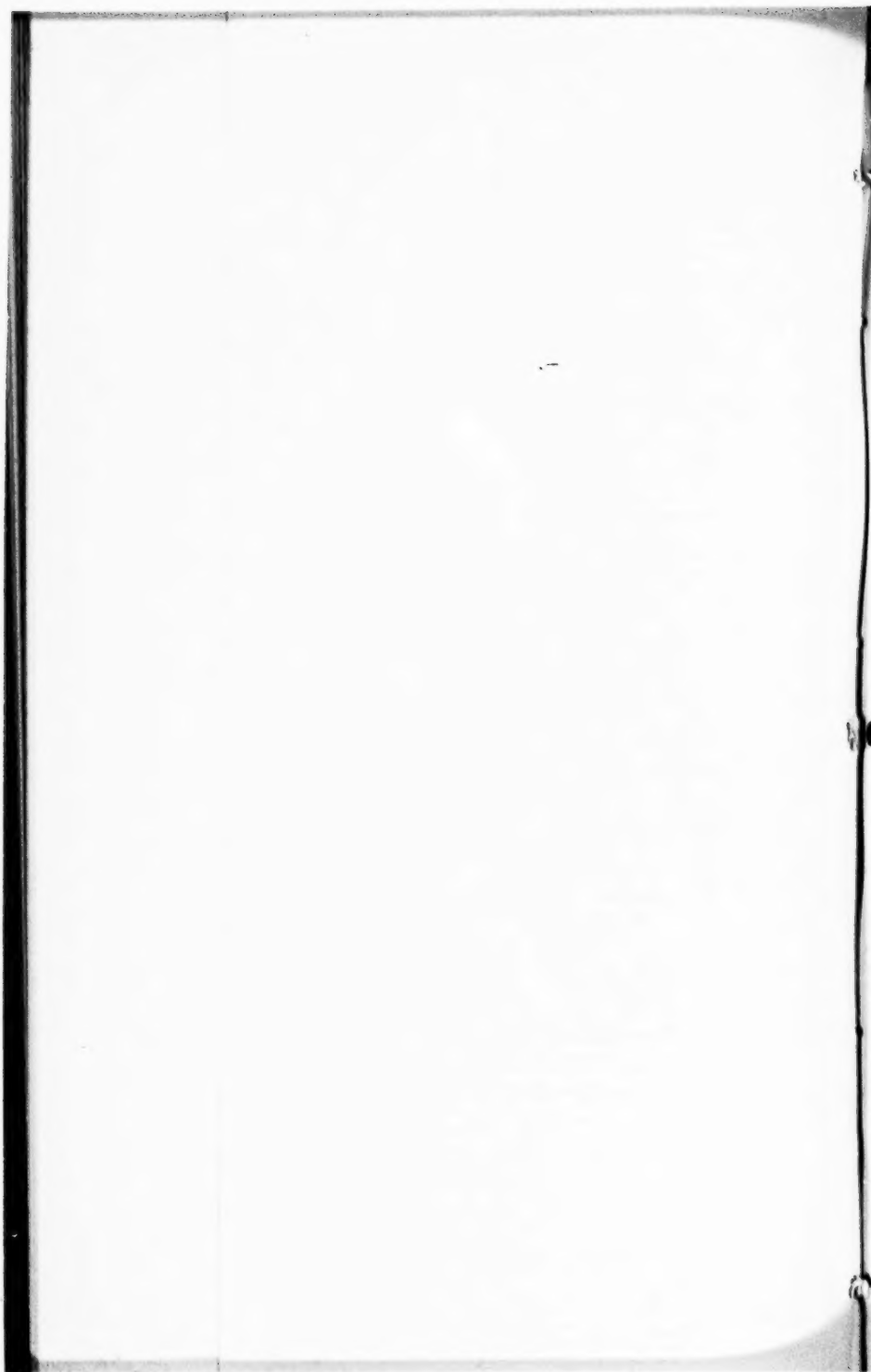
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(Endorsed) Nov 7 1918

—6—







623

39,013—25

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UNITED STATES PATENT OFFICE

| | | |
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| John L. Milton | } | Interference No. 39,013. |
| <i>vs.</i> | | Before the Honorable Examiner-of- |
| Edmund Joseph Kane | | Interferences. |

MEMORANDUM BRIEF IN SUPPORT OF MILTON'S
MOTION TO SHIFT THE BURDEN OF PROOF.

This interference involves Milton's patent No. 1,096,048, granted May 12, 1914, on an application filed October 28, 1910, and an application filed by the party Kane on January 14, 1915, purporting to be a division of an earlier Kane application filed on February 2, 1910. After the opening of the preliminary statements herein the Examiner-of-Interferences set the times for taking testimony in accordance with the dates of filing, as is the usual practice in the Patent Office. The thirty day period in which to make motions to dissolve elapsed on January 17, 1916. It is not our understanding that a motion to shift the burden of proof need necessarily be brought within the thirty day period, but in any event we submit that the facts as presented in the affidavit supporting the motion adequately and satisfactorily explain why the motion was not brought sooner. The party Kane has had ample notice of Milton's British Patent, inasmuch as it is referred to in both Milton's oath as filed with his United States application and also in Milton's preliminary 39013—54

(Endorsed) Nov 7 1918

624 statement herein. The certified copy of Milton's original application for a British Patent which, as we understand it, is a necessary part of this proceeding under the rule laid down by the Commissioner in such cases, was not received by us until February 7, 1916, and this motion is being noticed promptly upon receipt of said certified copy.

Milton's British Patent Application

As previously pointed out, Milton's oath as filed with his United States application refers to the British application in the following language to wit:

"and that no application for patent on said improvement had been filed by him or his representatives or assigns in any country foreign to the United States, except in England, where such an application was filed on October 28, 1909."

Again in his preliminary statement as filed herein the party Milton stated:

"I filed an application for British Letters Patent covering the same invention upon the 28th day of October 1909, which said application was given No. 24,838 of 1909."

With our motion to shift the burden of proof herein we are filing a copy of Milton's application for patent as filed in Great Britain on October 28, 1909. A duplicate of this certified copy has been duly served upon the counsel for Kane. The disclosure of the British application is identical with the disclosure of Milton's United States Patent in interference in so far as the subject matter in issue is concerned. The British application drawings correspond figure for figure with the United States drawings, and the specification of the British application as filed so describes the mechanism

—2—

(Endorsed) Nov 7 1918

625 that we believe counsel for Kane will not urge that the

British application as shown by the certified copy filed herein does not disclose the subject matter set forth in the claims of the issue. Certainly, if there arises any such question as to the identity of structure it can readily be disposed of by comparing the drawings of Milton's United States and British application and by reading the claims of the issue upon the British drawings.

The Law.

Section 4887 of the Revised Statutes reads in part as follows:

"An application for patent for an invention or discovery or for a design filed in this country by any person who has previously regularly filed an application for a patent for the same invention, discovery, or design in a foreign country which, by treaty, convention, or law, affords similar privileges to citizens of the United States shall have the same force and effect as the same application would have if filed in this country on the date on

which the application for patent for the same invention, discovery, or design was first filed in such foreign country, provided the application in this country is filed within twelve months in cases within the provisions of section forty-eight hundred and eighty-six of the Revised Statutes, and within four months in case of designs, from the earliest date on which any such foreign application was filed."

The present case falls clearly within the statute because the counts of the interference cover a mechanical invention, Milton's United States application was filed one year to the day after his filing in Great Britain, and Great Britain is a party to the International Convention for the Protection of Industrial Property. If counsel for Kane raises any question as to whether or not Milton's United States application was

13—56

—3—

(Endorsed) Nov 7 1918

626 filed in time to entitle him to the benefit of his date of filing in Great Britain, we would call attention to the case of Hess-Bright Mfg. Co. et al. vs. Standard Roller Bearing Co., 171 Fed. Rep., 114—147 O. G. 521, wherein it was held:

"In computing time under Rev. St. 4887, as amended by Act March 3, 1903, c. 1019, 32 Stat. 1225 (U. S. Comp. St. Supp. 1907, p. 1003), permitting the filing of an application for a patent in this country within 12 months after the filing of an application for a patent for the same invention in a foreign country, the day of the application in the foreign country is excluded, and where the foreign application was filed on February 23d, an application filed in this country on February 23d of the following year was in time. (See Patents, Cent. Dig. 131; Dec. Dig. 97)." (Syllabus).

In this case the inventions covered by the two patents in suit were patented in Germany on an application filed in that country on February 23, 1903. The earlier of the applications on which the two patents in suit were allowed was filed in this country on February 23, 1904. The contention of the defendants was to the effect that the period of twelve months referred to in section 4887 of the Revised Statutes had expired before the earlier application was filed in this country. The court held this contention to be unsound. In his opinion the court said:

"I conclude that in the computation of time February 23, 1903, should be excluded, and that February 23, 1904 was available for the purpose of filing the original application for the patents now in suit."

Article 4 of the International Convention for the Protection of Industrial Property, with relation to the rights of priority in the contracting countries, reads in part as follows:
13—57 —4—

(Endorsed) Nov 7 1918

627 "Whoever shall wish to avail himself of the priority of an anterior filing, shall be required to make a declaration showing the date and the country of this filing. Each country shall determine at what moment, at the latest, this declaration must be executed. This information shall be mentioned in the publications issued by the competent Administration, particularly on patents and the specifications relative thereto. The contracting countries shall require of one who makes a declaration of priority the production of a copy of the application (specification, drawings, etc.) previously filed, certified to be a true copy by the Administration which shall have received it. This copy shall be dispensed from any legalization. It may be required that it be accompanied by a certificate of the date of filing, issuing from this Administration, and of a translation. Other formalities shall not be required for the declaration of priority at the time of the filing of the application. Each contracting country shall determine the consequences of the omission of the formalities prescribed by the present article, unless these consequences exceed the loss of the right of priority.

Later other justifications can be demanded."

The party Milton has complied with the requirements of the Convention by filing a certified copy of his British Patent application as filed on October 28, 1909.

The practice to be followed in cases similar to the one at bar is clearly set forth by His Honor Commissioner Ewing in the recent case of *Steel & Steel vs. Meyers*, 205 O. G. 1021. The Commissioner rendered his decision in this case after the Examiners-of-Interferences had requested instructions as to the practice to be followed in fixing the burden of proof where the benefit of a foreign application is claimed by one or more of the parties under the provisions of section 4887 of the Re-

vised Statutes. The Commissioner's decision reads in part as follows:

9013—58

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(Endorsed) Nov 7 1918

628 "If an applicant who is involved in interference has stated in the oath to his original application that he filed the application in a foreign country, that should be taken, in my opinion, as establishing *prima facie* that the foreign application was filed by him or with his knowledge and consent. If, however, the original oath does not state that the foreign application had been filed, but the allegation is made in a subsequent oath or in the preliminary statement, the applicant should, in view of conflicting affidavits, be given the benefit of the filing of the foreign application only upon a stipulation of the parties or where it is established by duly taken testimony that he was in fact the party who filed the foreign application or that it was filed with his knowledge and consent.

The question whether an interferant is entitled to the benefit of his foreign application should be raised before the Examiner-of-Interferences rather than before the Primary Examiner, since it is one of evidence, as stated in *Raulet and Nicholson v. Adams*, *supra*, and at the time the interference is declared copies of the foreign application are not usually on file.

The Primary Examiner should therefore prepare the notices of interference in accordance with the date of filing of the applications in this country; but the Examiner-of-Interferences upon the filing of a proper motion, accompanied by a certified copy of the foreign application, shall in cases falling within the above ruling give the party filing the same the benefit of the foreign application if in his opinion the invention in issue is disclosed therein."

The oath accompany Milton's original application refers to his application in England and, therefore, in accordance with the rule laid down by the Commissioner should be taken as establishing *prima facie* that the foreign application was filed by him with his knowledge and consent. The party Milton is filing a motion to shift the burden of proof accompanied by a certified copy of his foreign application and therefore Milton is to be given the benefit of his foreign ap-

plication, if the Examiner-of-Interferences finds that the invention in issue is disclosed in the foreign application.

39013—59

—6—

(Endorsed) Nov 7 1918

629

Conclusion.

We submit, therefore, that the subject matter in issue is disclosed in Milton's British application as filed on October 28, 1909, and that Milton has complied with all of the requirements of the Statute, Convention and Patent Office practice whereby he is entitled to the benefit of his date of filing in Great Britain. We submit, therefore, that after the Examiner-of-Interferences has convinced himself that the subject matter of the issue is disclosed in Milton's British application, the burden of proof must be shifted to rest upon the party Kane.

Respectfully submitted,

39013—60

(Endorsed) Nov 7 1918

LYNN A. WILLIAMS

Attorney for Milton.

630

2—224

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 26.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington, D. C.

JHD

February 18, 1916.

In Re Interference No. 39013.

Kane

v.

Milton.

126

} Before the Examiner of
Interferences.

(Rubber stamp) U. S. Patent Office Interference Division
Feb 18 1916 Mailed.

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

THOMAS EWING

Commissioner of Patents.

6—1652

This case is before me for decision on a motion to shift the burden of proof, filed February 15, 1916, in behalf of the junior party, Milton. The motion is opposed by Kane.

Milton is directly involved in this interference on a patent which resulted from an application filed October 28, 1910. Kane relies upon an application which is a division of an earlier application filed February 2, 1910. Milton by this motion is seeking to obtain advantage, under Section 4887 of the Revised Statutes, of a British application filed in his name on October 28, 1909.

Milton's motion is somewhat late in its presentation, but no objection has been raised on that ground and the delay has been sufficiently explained in the showing which accompanies the motion.

Kane opposes the motion on the ground that the copy of the British application which has been filed has not been duly authenticated. The copy which has been filed bears what
39013—61

(Endorsed) Nov 7 1918

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39013—2.

purports to be the seal of the British Patent Office, and the signature of the Controller General of Patents, Designs, and Trade-marks. Kane contends, however, that the authority of the above mentioned officer of the British Patent Office should be attested by a United States consular officer whose authority should also be certified to by the Secretary of State at Washington.

What should be accepted as a certified copy to be used in support of a claim of priority of an anterior filing in a foreign country is defined in article 4 of the International Convention for the protection of Industrial Property, quoted by the Commissioner in his decision in the case of Steel & Steel v. Myers, 205 O. G., 1021, as follows:

(d) Whoever shall wish to avail himself of the priority of an anterior filing, shall be required to make a declaration showing the date and the country of this filing. Each country shall determine at what moment, at the latest, this declaration must be executed. This information shall be mentioned in the publications issued by the competent Administration, particularly on patents and the specifications relative thereto. The contracting countries shall require of one who makes a declaration of priority the production of a copy of the application (spe-

cification, drawings, etc.) previously filed, certified to be a true copy by the Administration which shall have received it. This copy shall be dispensed from any legalization. It may be required that it be accompanied by a certificate of the date of filing, issuing from this Administration, and of a translation. Other formalities shall not be required for the declaration of priority at the time of filing of the application. Each contracting country shall determine the consequences of the omission of the formalities prescribed by the present article, unless these circumstances exceed the loss of the right of priority.

In view of the above mentioned decision in the case of *Steel & Steel v. Myers*, and the definition of the requirements with respect to certification, quoted therein from the International Convention for the protection of Industrial Property, it is held that the copy of Milton's British application which has been filed is sufficient, as a basis for shifting the burden of

39013—62

(Endorsed) Nov 7 1918

632

39013—3.

proof, without further formal authentication, if otherwise satisfactory.

The motion is also opposed on the ground that there is no evidence as to the identity of the Milton who filed the United States application involved in this interference, and the Milton named in the certified copy of the British patent. This point has also been determined by the Commissioner in his decision in the case of *Steel & Steel v. Myers*, *supra*, in which it is said:

If an applicant who is involved in interference has stated in the oath to his original application that he filed the application in a foreign country, that should be taken, in my opinion, as establishing *prima facie* that the foreign application was filed by him or with his knowledge and consent.

Kane also objects to the sufficiency of Milton's British application as a basis for shifting the burden of proof because Milton's United States application was not filed until the anniversary of the filing date of the British application. This point was decided adversely to Kane's contention in the case of the *Hess-Bright Mfg. Co. et al. v. Standard Roller Bearing Co.*, 147 O. G., 521, in which it was held that the date upon which the foreign application was filed should be ex-

cluded in determining the year provided by the statute for filing the United States application.

In the case of *Steel & Steel v. Myers*, *supra*, it was held that the burden of proof should not be shifted unless it is found upon examination that the application relied upon contains a satisfactory disclosure of the invention in issue. On examination of the British patent relied upon by Milton, it is held that the invention in issue is fully disclosed therein. As to this point there appears to be controversy.

39013—63

(Endorsed) Nov 7 1918

633

39013—4.

It is asserted in behalf of Kane that the invention in issue was disclosed by him to Milton, and that an affidavit to that effect has been filed in the Kane application. The burden of proving such a disclosure would rest upon Kane. If, therefore, Milton is entitled to the benefit of the filing date of his British patent, and it is held that he is, Kane's alleged disclosure to Milton would constitute no reason for refusing to make Milton the senior party.

Milton's motion to shift the burden of proof is granted, and times for taking testimony and for final hearing are reset as follows:

Testimony in chief of Kane to close April 19, 1916.

Testimony of Milton to close May 19, 1916.

Rebuttal testimony of Kane to close June 3, 1916.

Final hearing August 3, 1916, at 11 A. M.

H. E. STAUFFER

Examiner of Interferences.

39013—64

(Endorsed) Nov 7 1918

414

Defendants' Exhibit No. 49.

634

39,013—27

Doc.

(Rubber stamp) Mail Room Apr. 17 1916 U. S. Patent
Office

IN THE UNITED STATES PATENT OFFICE

| | | |
|--------------------|---|----------------------------|
| John L. Milton | } | Before the |
| <i>v.</i> | | Examiner of Interferences. |
| Edmund Joseph Kane | | Interference No. 39,103 |

STIPULATION.

The Honorable Commissioner of Patents consenting, it is hereby stipulated by and between Counsel for the parties hereto that the time allotted the party Edmund Joseph Kane in which to take his testimony in chief be extended thirty (30) days from the date now set, that is, extended to close on May 19, 1916; the other times to be extended accordingly.

BROWN NISSEN & SPRINKLE,

Attorneys for Kane.

LYNN A. WILLIAMS

Attorney for Milton.

S

39013—65

(Endorsed) Nov 7 1918

635

2—224

Room No. 261.
Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 28.

DEPARTMENT OF THE INTERIOR

United States Patent Office

IAW

Washington, D. C.

April 18, 1916.

In Re Interference No. 39013.

Kane 323

v.

Milton.

} Before the Examiner of Interferences.

(Rubber stamp) U. S. Patent Office Interference Division
Apr 18 1916 Mailed

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

6—1652

THOMAS EWING
Commissioner of Patents.

The stipulation filed herein April 17, 1916, is approved and times are extended as follows:

Testimony in chief of Kane to close May 19, 1916.

Testimony of Milton to close June 19, 1916.

Rebuttal testimony of Kane to close July 5, 1916.

Final hearing: September 5, 1916, at 11 A. M.

H. E. STAUFFER
Examiner of Interferences.

39013—66

(Endorsed) Nov 7 1918

416

Defendants' Exhibit No. 49.

636

2-224

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 29.

DEPARTMENT OF THE INTERIOR

United States Patent Office

LBF

Washington, D. C.

September 6, 1916.

(Rubber stamp) U. S. Patent Office Interference Division
Sep 6 1916 Mailed

In Re Interference No. 39013.

Kane

v.

Milton.

247

} Before the Examiner of
Interferences.

Please find below a communication from the Examiner in charge of Interferences in regard to the above-entitled case.
Very respectfully,

6-1652

THOMAS EWING
Commissioner of Patents.

The date set for final hearing in this case having passed, and Kane, the junior party, having failed to file any testimony within the time allowed for that purpose, priority of invention of the subject matter in issue is hereby rendered in favor of John Lewis Milton, the senior party.

Limit of appeal: September 26, 1916.

H. E. STAUFFER
Examiner of Interferences.

39013-67

(Endorsed) Nov 7 1918

637

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39,013—30

(Rubber stamps) Mail Room Sep 25 1916 U. S. Patent
Office Docket Clerk Sep 25 1916 U. S. Patent Office

IN THE UNITED STATES PATENT OFFICE

| | | |
|--------------------|---|----------------------------|
| John L. Milton | } | Before the |
| vs. | | Examiner of Interferences. |
| Edmund Joseph Kane | | Interference No. 39,013. |

STIPULATION

It is hereby stipulated by and between Counsel for the parties hereto that the limit of appeal in the above entitled cause now set to expire on September 26, 1916, be extended for a further period of five days.

S (note)

WILLIAMS & BRADBURY
Attorneys for Kane.
LYNN A. WILLIAMS
Attorneys for Milton.

39013—68

(Endorsed) Nov 7 1918

418

Defendants' Exhibit No. 49.

638

2—224

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 31.

DEPARTMENT OF THE INTERIOR

United States Patent Office

LBF

Washington, D. C.

September 27, 1916.

(Rubber stamp) U. S. Patent Office, Interference Division
Sep 27 1916 Mailed
In Re Interference No. 39013.

| | | |
|---------|-----|---|
| Kane | 425 | } Before the Examiner of Interferences. |
| v. | | |
| Milton. | | |

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.
Very respectfully,

6—1652

THOMAS EWING
Commissioner of Patents.

The stipulation filed September 25, 1916, is approved and in accordance therewith the time within which appeal may be taken from the decision of September 6, 1916, is hereby extended to October 2, 1916.

H. E. STAUFFER
Examiner of Interferences.

39013—69

(Endorsed) Nov 7 1918

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39,013—32

(Rubber stamp) Docket Clerk Sep 28 1916 U. S. Patent
Office

UNITED STATES PATENT OFFICE

| | | |
|--------------------|---|----------------------------|
| John L. Milton | } | Before the |
| v. | | Examiner of Interferences. |
| Edmund Joseph Kane | | Interference No. 39,013. |

STIPULATION

It is hereby stipulated and agreed by and between counsel for the parties hereto that the judgment of priority heretofore rendered in favor of the party John L. Milton shall be vacated and times set for the taking of testimony and final hearing.

LYNN A. WILLIAMS
Attorney for Milton.
WILLIAMS & BRADBURY
Attorneys for Kane.

September 18, 1916.
39013—70
(Endorsed) Nov 7 1918

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 33.

DEPARTMENT OF THE INTERIOR

United States Patent Office

IAW

Washington, D. C.

September 29, 1916.

In re Interference No. 39013.

Kane
v.
Milton.

} Before the Examiner of
Interferences.

(Rubber stamp) U. S. Patent Office Interference Division
Sep 29 1916 Mailed

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

THOMAS EWING
Commissioner of Patents.

The stipulation filed herein September 28, 1916, is approved and in accordance with the provisions thereof the judgment entered September 6, 1916, is hereby vacated and set aside, and times for the taking of testimony are set as follows:

Testimony in chief of Kane to close October 30, 1916.

Testimony of Milton to close December 1, 1916.

Rebuttal testimony of Kane to close December 16, 1916.

Final hearing: February 16, 1917, at 11 A. M.

Because of the delays incident to the prosecution of the interference, the parties will be expected to take any testimony which they seek to introduce within the times now fixed, and the Office will not be in position to approve stipulations for extended periods.

H. E. STAUFFER
Examiner of Interferences.

39013-71

(Endorsed) Nov 7 1918

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(Rubber stamp) (Not legible).

39,013—34

UNITED STATES PATENT OFFICE

Edmund Joseph Kane } Testimony & Exhibit
vs. } for
John L. Milton } Interference No. 39,013.

KANE

NOTICE

(Not legible)

Mr. Lynn A. Williams,
1315 Monadnock Block,
Chicago, Ill.

Dear Sir:

Please take notice that on Monday, October 23, 1916, beginning at two o'clock P. M., we shall proceed to take testimony on behalf of the party Kane at the office of Williams, Bradbury & See, 1315 Monadnock Block, Chicago, Ill., before Mary A. Cook, a Notary Public in and for the County of Cook, and State of Illinois. Under this notice we expect to examine Edmund Joseph Kane and Maurice Kane, both of Chicago, Illinois. You are invited to attend and cross-examine the witnesses produced.

Respectfully,

WILLIAMS & BRADBURY
Attorneys for Kane.

Due and timely service of the above Notice is hereby acknowledged this 21st day of October 1916.

LYNN A. WILLIAMS
Attorney for Milton.

39013—72

(Endorsed) Nov 7 1918

Edmund Joseph Kane }
vs. } Interference No. 39,013.
John L. Milton }

Testimony taken on behalf of the party Edmund Joseph Kane this 23d day of October, 1916, at two o'clock P. M., before Mary A. Cook, Notary Public, in and for the County of Cook, and State of Illinois, at the office of Williams, Bradbury & See, 1315 Monadnock Block, Chicago, Illinois.

Present: Albert G. McCaleb on behalf of Kane.

EDMUND JOSEPH KANE (*the fi*) being called in his own behalf after being duly sworn on oath, testifies as follows is answer to interrogatories propounded by counsel for Kane.

Q 1. Please state your name, age, residence and occupation.

A Edmund Joseph Kane, 122 Waller Ave., Chicago. Age 33. Mechanical Engineer, International Harvester Co.

Q 2. Are you the same Edmund Joseph Kane whose application for patent, Serial No. 2097, filed January 14, 1915, is involved in the above entitled interference?

A Yes.

Q 3. Where were you employed during the year 1909?

A Employed by the Webster Mfg. Co.

Q 4. Did you enter the employ of the company in 1909.

A Entered the employ October 1908.

Q 5. What were your duties during your employment with the Webster Mfg. Co?

A I was employed as a salesman and demonstrator.

39013J-73

1-E. J. Kane

(Endorsed) Nov 7 1918

643 Q 6. Was the Webster Mfg. Co. manufacturing and selling low tension ignition magnetos at the time you entered its employ?

A Yes.

Q 7. Will you please describe briefly what kind.

A The magneto the Webster people were making at that time was a spring magneto the magneto being mounted on the boss at the side of the cylinder connected up with igniter

of the engine by means of a rod and connected with an eccentric mounted on the cam shaft of the engine.

Q 8. Then I take it that other than the electrical connection between the magneto and the igniter and this rod extending from the magneto to the igniter there was no mechanical connection between the magneto and the igniter?

A. You are correct the only connections were the rod and wire.

Q 9. In that form of construction was it possible to remove the magneto without removing the igniter or vice versa?

A Yes that was possible.

Q 10. By what name was that magneto known to the trade?

A That magneto was known as the Milton Magneto.

Q 11. Do you happen to know who was the principal purchaser of these magnetos to which you refer?

A The principal purchaser was the International Harvester Co.

Q 12. I hand you herewith a pamphlet which has been marked in this case "Kanes' Exhibit No. 1?" and ask you to tell what it illustrates?

A This pamphlet illustrates the method of attaching the magneto to the International Harvester Company's engines when I first was employed by the Webster Mfg. Co. This is the construction in which the magneto is mounted 39013-74

—2 E. J. Kane

(Endorsed) Nov 7 1918

644 on a boss on the side of the cylinder and operates the igniter by means of a rod and is connected to the eccentric on the cam shaft of the engine by a combined lever and rod mechanism.

Q 13. Was this type of apparatus satisfactory in operation and did it meet with the approval of the trade?

A This type of construction was not satisfactory and of

did not meet with the approval of the trade because/the great amount of trouble it gave in the field.

Q 14. Will you please state briefly some of the short comings of this class of apparatus?

A Due to the fact that you have the magneto and igniter mounted at different parts on the cylinder it was very easy for these parts to get out of adjustment with each other; also due to the fact that the magneto which was rather large and cumbersome was mounted on a small boss on the side of

the cylinder it was very difficult to rigidly hold the magneto in place and any small movement of the magneto would so disturb the proper relation between the magneto and movable electrode arm so as to put the time of spark of the engine out of time with the time of best spark of the magneto and this would cause a great deal of trouble in the field.

Q 15. Did you ever have occasion to design a low tension ignition outfit?

A Yes I designed one.

Q 16. Will you please state rather fully the circumstances which impelled you to design the apparatus to which you refer in your last answer?

A The Milton Magnetos attached to the boss on the side of the cylinder were giving so much trouble in the field that Mr. Watterman, Superintendent of the Milwaukee Works, of 39013—75

3—E. J. Kane

(Endorsed) Nov 7 1918

645 the International Harvester Co. wrote a letter saying that unless some radical improvements were made in this attachment that he would not recommend using the Milton Magneto any more on the International Harvester Company's stationary engines. For this reason I started to think quite seriously about what could be done to improve the attaching of magnetos to engines. I conceived the idea of mounting the magneto direct onto the igniter part of the engine and simplifying the operating mechanism so as to eliminate the troubles that we were having with **(this)* the Milton magneto and to meet the objections of Mr. Watterman's letter.

Q 17. Will you please state as closely as you can the dates when you conceived of the apparatus incorporated in the design which you made; also as closely as you can when you disclosed your ideas to others and when you made drawings showing your designs?

A A The idea of mounting the magneto directly on the spark plug was conceived some time in February **(19100)* 1909 and drawings made showing magneto and spark plug

11th

mounted on one piece casting were made April **(9th)* and

11th

April 14th, 1909. The drawing made April **(9th)* was dis-

Maurice

closed to Mr. **(Morris)* Kane, Mr. T. K. Webster, Mr. Wm.

*Matter in italics in parentheses, stricken out in original transcript.

Cavanaugh and Mr. Gerald Chiville. The drawing made April 14th was disclosed to Mr. Webster, Mr. Gerald Chiville, Mr. Abbott Munn.

Q 18. Will you please state who the gentlemen mentioned in your last answer are and what they were doing at the time you made your disclosure to them?

A Mr. Maurice Kane was General Manager of the Experimental Department of the International Harvester Co. He is also my father. Mr. Wm. Cavanaugh was Asst. Gen. 39013-76 4—E. J. Kane

(Endorsed) Nov 7 1918

646 Magr. of the Experimental Dept. of the International Harvester Co. Mr. T. K. Webster was President of the Webster Mfg. Co. Mr. Gerald Chiville was a Draftsman employed by the Webster Mfg. Co. Mr. Abbott Munn was Foreman in the Magneto Department of the Webster Mfg. Co.

Q 19. Will you please describe briefly the construction shown on the drawing which you say was made on April 11th, 1909, and which you say was disclosed to your father, Mr. Maurice Kane, Mr. T. K. Webster, Mr. Cavanaugh and Mr. Chiville?

A The construction shown on the drawing dated April 11, 1909, briefly consists of an igniter plug with an arm extending around from the side of the plug carrying a magneto. Mounted on the rotor shafts of the magneto is a trip with a small lug or projection on it which was so arranged as to engage a screw on the movable electrode arm. This trip was connected by means of springs to the magneto pole pieces and was operated by means of a lever which in turn was connected with an eccentric on the engine.

Q 20. I hand you herewith a drawing and ask you if you recognize the same?

A Yes I recognize this drawing as the one I made on April 11th, 1909.

Q 21 In the lower right hand corner of this drawing I note the legend "E. J. Kane, April 11, 1909." Do you know who put this legend on the drawing and when it was put on?

A I put this legend on the drawing at the time I made it, which was April 11, 1909.

Q 22. In this form of construction did you intend to have 39013-77 5—E. J. Kane

(Endorsed) Nov 7 1918

647 the igniter formed in one piece with the bracket?

A In the construction shown on the drawing dated April 11, 1909, it was my intention to show the magneto bracket and the igniter plug cast in one piece.

By Mr. McCaleb The drawing referred to by the witness is offered in evidence and the Notary is requested to mark the same "Kane's Exhibit No. 7, Drawing of April 11, 1909."

Q 23. Will you please describe briefly the construction, shown on your drawing of April 14 ^{*(1901)} 1909?

A The construction shown on the drawing marked April 14, 1909, consisted of a magneto ^{*}(*spark plug*) and igniter, and means for operating the magneto and separating the points at the spark plug. This drawing shows the igniter and the magneto bracket cast in one piece. It also shows the details of this construction fully.

Q 24. I hand you herewith a drawing which has been marked in this case with the legend "Kane's Exhibit No. 5" and ask you to identify the same if you can.

A This drawing which you have handed me is the one that I made and finished on April 14, 1909, and I identify the legend in the lower right hand corner as one that I put on it at the time that I finished this drawing which was April 14, 1909.

Q 25. What is the condition of the drawings "Kanes Exhibits Nos. 5 and 7 as compared with their condition when you made them?

39013—78

6—E. J. Kane

(Endorsed) Nov 7 1918

648 Q 25. Also please state where these drawings have been? since the dates they were made?

A These two drawings are in the same condition as when I originally made them. For some time after I made them these drawings were in my possession at 123 North Waller Ave. Chicago, and were later turned over to my patent attorneys, Brown, Nissen & Sprinkle. At the time the Webster Electric Co. purchased my patent rights I directed Brown, Nissen & Sprinkle to turn these drawings over to their patent attorneys, Williams & Bradbury.

Q 26. Will you please give a rather detailed description of this drawing of April 14, 1909, using a red pencil to identify the several parts. In this connection it might be well for you to explain in some detail the operation of the mechanism as well as its construction?

*Matter in italics in parentheses, stricken out in original transcript.

A The parts and operation as shown on my drawing marked April 14, 1909, and marked with red pencil are as follows:

No. 1 is the cylinder of the engine.

No. 2 is the igniter plug with the magneto bracket

No. 3 cast integral with the plug.

No. 4 is the inductor finger mounted on the rotor shaft

No. 5. The inductor finger is held in normal position by two springs No. 6, which are connected onto the other end to the pole pieces of the magneto No. 7.

No. 8 is the arm on the movable electrode No. 9.

No. 10 is a screw through the movable electrode arm No. 8. The inductor finger No. 4 is operated by means of a push rod No. 11 which in turn is operated by eccentric on the cam shaft of the engine. This eccentric is not shown on the draw-39013—79

7—E. J. Kane

(Endorsed) Nov 7 1918

649 ing. A cam No. 12 is placed on the push rod No. 11 and can be adjusted back and forth on the push rod No. 11 by means of the set screw in it. The push rod No. 11 works over a roller No. 13. This roller is carried on an eccentric shaft No. 14 and this eccentric shaft No. 14 is mounted on a bearing which is also part of the casting No. 3. On the other end of the eccentric shaft No. 14 is a small lever No. 15. By moving this lever back and forth the roller No. 13 is moved back and forth vertically. The magneto No. 16 is mounted on the bracket No. 3 by means of a boss and the shaft No. 5 which carries the roller No. 17 is journaled in the casting No. 3, and the rotor finger No. 4 lies in a depression of the casting 3.

Briefly described the operation of this mechanism is as follows: The push rod No. 11 is actuated by the cam on the engine and as it **(moves)* reciprocates it engages the rotor finger No. 4 and oscillates the rotor finger, rotor shaft, and rotor against the tension of the springs No. 6. When the cam No. 13 on the push rod No. 11 engages the roller No. 13 the push rod No. 11 is raised so that the rotor finger No. 4 is quickly brought back to its original position and carried past its original position by the inertia of the rotor finger and rotor. As the rotor moves through the magneto it generates a current and as the rotor arm No. 4 is carried past its original position by the tension in the springs the exten-

*Matter in italics in parentheses, stricken out in original transcript.

sion on the **(arms)* rotor arm engages the screw No. 10 on the arm 8 on the movable electrode No. 9. This engaging of the screw 10 on the rotor finger 4 causes the points inside the cylinder of the engine to separate and a spark to occur. When the rotor finger 4 engages the screw 10 the screw 10
39013—50 8—E. J. Kane

(Endorsed) Nov 7 1918

650 rides up on the rounding part of the rotor finger 4 and when the springs 6 bring the rotor finger 4 back to its normal position the screw 10 riding on the round or camlike part of the rotor finger 4 allows the points in the inside of the engine cylinder to come together gradually and eliminates pound and wear on the points. It will be noticed that the screw 10 has a lock nut on it and by loosening this nut the screw 10 may be adjusted back and forth as conditions require. It will be noticed that on the movable electrode there is a small spring No. 18 and it is obvious to any one inspecting the drawing that this spring is very much smaller and weaker than the two springs No. 6. It is necessary to have this spring lighter and weaker than the two springs No. 6 in order that this spring allows the movable electrode No. 9 to move when the rotor finger 4 comes in contact with the screw 10. The eccentric 14 is operated by the handle 15 and as the handle 15 is moved it raises or lowers the roller 13. As the push rod 11 rests on this roller it is also raised or lowered. It is plain that the less the push rod 11 engages the rotor finger 4 that the quicker the rotor finger will be released by the push rod 4. It is therefore possible by moving the lever 15 to change the time the engine sparks.

Q 23. Prior to the time you conceived of the construction shown on this drawing had you ever heard of a similar construction?

A No I had never heard of a similar construction.

Q 24. Had you ever heard of a construction wherein the igniter plug was formed integral with the magneto supporting bracket.

A No, I had never heard of a construction in which the magneto bracket was formed integral with the igniter plug.
31013—81 9—E. J. Kane

(Endorsed) Nov 7 1918

651 Q 25. Had you ever heard of a construction wherein

**Matter in italics in parentheses, stricken out in original transcript.*

the movable electrode was engaged directly by a part fixed upon and moving with the magneto rotor?

A No, I had never heard of such a construction.

Q 26. How, if at all, does the construction shown upon this drawing Kane's Exhibit No. 5 differ from the construction shown in your patent application involved in this interference? For your convenience, I hand you herewith a copy of your patent drawing which has been marked "Kane's Exhibit No. 4."

A **(De)* The difference between the drawing marked April 14, 1909, and the patent office drawing marked Exhibit No. 4 consists only in that on the patent office drawing No. 4 is shown a device for lifting the push rod out of engagement with the rotor finger on the idle strokes of the engine. This part of the mechanism I have claimed in another patent application.

Q 27. Was the structure shown on your drawing of April 14, 1909, ever embodied in an operative machine? If so please state when and under what circumstances.

A The structure shown in my drawing April 14, 1909, was embodied in a machine the latter part of April 1909. This machine was built at the factory of the Webster Mfg. Co. at Western Ave. and 15th St., Chicago.

Q 28. How are you able to fix the date?

A I fix this date because of the date on my drawing April 14th because I remember that as soon as this drawing was completed that we immediately proceeded to make working drawings and that just as soon as possible a machine was made.

39013—82

10—E. J. Kane

(Endorsed) Nov 7 1918

652 Q 29 How many of these complete machine were made by the Webster Mfg. Co. during 1909, if you know?

A To the best of my recollection there were only 3 or 4 of these complete machines made by the Webster Mfg. Co.

Q 30. In the first machines which you say were made in the latter part of April 1909, was the igniter plug cast integral with the bracket which carried the magneto?

A In the first machine which I said was made in the latter part of April 1909 the igniter plug and the magneto bracket were cast integral.

*Matter in italics in parentheses, stricken out in original transcript.

Q 31 How was the opening of the electrodes accomplished in these machines?

A These electrodes were operated and the points separated as shown on my drawing dated April 14, 1909.

Q 32. Do you know what has become of these first machines?

A The very first machine, the one made in the latter *•(part)* of April, I took up to the Milwaukee Works of the International Harvester Co., installed it on an engine and left it there for test purposes. One of the other machines that was made a little bit later was sent out somewhere into the country and put on a tractor. The other machines I am not sure where they went.

Q 33 Do you know whether the International Harvester Co. ever sold magnetos embodying the invention disclosed in your drawing of April 14, 1909?

A I know that the International Harvester Co. sold a very large number of their engines equipped with the device shown on my drawing dated April 14, 1909. The Webster Mfg. Co. 39013.83

11—E. J. Kane

(Endorsed) Nov 7 1918

653 supplied the Harvester Co. with the magneto rotor, rotor shaft, rotor finger, and springs, and the igniter plug and bracket integral in one piece were manufactured by the International Harvester Co.

Q 34 How long were you in the employ of the Webster Co.?

A I was in the employ of the Webster Co. two years.

Q 35. Were you in Chicago all of that time?

A No. I was not in Chicago all that time. Along in the spring of 1909 the Webster Mfg. Co. started to manufacture high tension magnetos at Tiffin, Ohio, and about August 1909 they moved the low tension part of their business down there also. In the fall of 1909 I moved down to Tiffin and was there for some time. As near as I can recollect for several months.

Q 36. Were the first machines embodying the invention shown on your drawing of April 14, 1909, built before or after the low tension magneto business was transferred to Tiffin?

A The first machines embodying the construction shown in my drawing of April 14, 1909, were built before the low tension part of the magneto business was moved to Tiffin.

Q 37. I hand you herewith a pamphlet with has been marked Kane's Exhibit No. 2" and will ask you to state what is illustrated on pages 4 and 5 thereof.

A This pamphlet which you hand me is a direction paper issued by the International Harvester Co. of America and cuts on pages 4 and 5 show a magneto with integral bracket and plug construction substantially as shown on my drawing of April 14, 1909.

39013—84

12—E. J. Kane—

(Endorsed) Nov 7 1918

654 Q 38. I show you a piece of apparatus marked "Kane's Exhibit No. 6" and will ask you to please state what it is.

A This machine that you show me is a magneto attachment as manufactured by the Milwaukee works of the International Harvester Co., and is substantially the same construction as is shown on my drawing of April 14, 1909. It shows an integral bracket and igniter plug construction. The means for rendering the magneto inoperative on the idle strokes of the engine have been changed slightly from the means illustrated on the Patent Office drawing marked "Exhibit No. 4."

Q 39. When did you first see International Harvester equipment identical with Exhibit No. 6?

A I first saw International Harvester Co. magneto attachments identical with machine labeled Exhibit No. 8 some time in September 1909, at the Milwaukee works of the International Harvester Co.

Q 40. I notice that in pamphlet "Kane's Exhibit No. 2" the magneto therein shown is referred to as the Milton magneto, do you happen to know why that name was used?

A The magneto used on these attachments was known as the Milton Magneto so that it was natural for the International Harvester Co. to label their direction paper, Directions for attaching Milton Magneto.

Q 41. Where was your drawing of April 11, 1909, Kane's Exhibit No. 7 made.

A The drawing labeled April 11, 1909, was made at my residence 123 No. Waller Ave. Chicago.

Q 42. Where was the drawing of April 14, 1909, Kane's Exhibit No. 5 made?

The drawing labeled April 14, 1909, was made on the fifth floor of the Webster Mfg. Co., Western Ave. & 15th St. Chicago

39013—85

13—E. J. Kane

(Endorsed) Nov 7 1918

655 Q 43. Was there any one near you, so far as you remember who might have observed you making this drawing?

A This drawing was made on an old drawing table in a kind of a stock room on the floor of the building where they were manufacturing the magnetos, and any of the men that were working up there at the time could have observed me making this drawing. Among those that were working with me at this time were Mr. Abbott Munn and Mr. Ernest Bruce. I am sure that Mr. Munn saw this drawing at the time I was working on it and I think possibly that Mr. Bruce did.

Q 44. When did you first learn of the fact that Mr. John L. Milton had applied to the Patent Office for patent covering the subject matter shown in the Milton patent **(whi)* with which you are in interference?

A I first learned of the fact that Mr. John L. Milton had obtained a patent on this device in which we are in interference when I saw that a patent had been issued to him when I was looking through the Patent Office Gazette very shortly after the date it was issued.

Q 45. Prior to that time had you any idea that any other than yourself claimed to be the inventor of this subject matter?

A **(A)* Prior to this time I had absolutely no idea that anybody else claimed to be the inventor of this device.

Q 46. Are you acquainted with Mr. Milton and if so when did you first make his acquaintance.

A I first made the acquaintance of Mr. John L. Milton some time early in the spring of 1908. I met him at the Milwaukee works of the International Harvester Co.

Q 47. Was Mr. Milton employed by the Webster Mfg. Co. at any time during your employment by said company?

A Mr. Milton was employed by the Webster Mfg. Co. at the time I was employed there. He was employed as Chief Engineer and when I first went there in the fall of 1908 he was 39013—86

14—E. J. Kane—

(Endorsed) Nov 7 1918

656 doing a great deal of work on both the high tension magnetos and also on the low tension magnetos. Along in the spring of 1909 because we had obtained a large order for high tension magnetos Mr. Milton was working pretty near exclusively on the high tension magnetos.

*Matter in italics in parentheses, stricken out in original transcript.

Q 48 Did Mr. Milton ever talk with you regarding a unitary construction wherein the plug and magneto supporting bracket were formed integral and wherein the movable electrode was operated directly by an arm on the oscillatory part of the magneto before you had completed and disclosed to others your drawing of April 14, 1909?

A Mr. Milton never talked to me about such a construction as you have described until after my drawing dated October 14, 1909 was completed.

Q 49 Do you remember when the first ignition outfit embodying the construction shown on your drawing of April 14, 1909, was tried out, if so, please state who were present at that test?

A The first construction as shown on my drawing April 14, 1909 was tested and tried out on a gas engine either the latter part of April or the first part of May 1909. There was present when we first tested this machine out Mr. Abbott Munn and myself. There may have been some of the other men of the works present as this test was made up on the fifth floor of the building and any of the men around there could have seen the test made. Shortly after we attached this device to an engine and tested it a delegation of officials from the general offices of the International Harvester Co. visited the fifth floor of the Webster Mfg. Co. to see this
39013—87 15—E. J. Kane

(Endorsed) Nov 7 1918

657 device Among these men were Mr. Maurice Kane, my
and
father, Mr. Wm. Cavanaugh, Mr. John S. Stewart, / I
think Mr. Haney, Foreign Sales Manager.

Which was all of the testimony given by the witness Edmund Joseph Kane.

EDMUND JOSEPH KANE.

39013—88

16—E. J. Kane.

(Endorsed) Nov 7 1918

658 MAURICE KANE the next witness called on behalf of the party Edmund Joseph Kane being first duly sworn on oath testifies as follows in answer to interrogatories propounded by counsel.

Q 1. Please state your name, age, residence and occupation.

A Maurice Kane, Age 67; Occupation, connected with the

International Harvester Company in an advisory capacity. Formerly was General Manager of the Experimental Department for the same concern. Residence, Chicago.

Q 2. Are you acquainted with Mr. E. J. Kane, who is a party to this interference?

A Yes, quite well acquainted with him. He is my oldest son.

Q 3. Will you please state what, if anything, you know about a low tension magneto ignition outfit invented and developed by your son some years ago?

A At the time that I had charge of the Experimental Department for the International Harvester Co. we were using magnetos on our engines purchased from the Webster Co. After my son Edmund Joseph got out of school he went to work for the Webster Co. The magnetos that we were using at this time were giving a great deal of trouble and we had a great deal of complaint from our agents in the country. Those complaints were generally submitted to me. We were having so many of them that I took the matter up with my son and asked him why they didn't do something to remedy
39013—89 1—Maurice Kane

(Endorsed) Nov 7 1918

659 the trouble. My recollection is that he said that, Of course, although he had been doing some work on them that that was not his particular job, although he recognized that they were having the trouble because he had been in the country a great deal looking after the magnetos and adjusting the same so that they would operate. I intimated to him that unless there was something done very soon we would have to quit using the Webster magnetos. As near as I can remember that was in the spring of 1909. Well, he said he would take the matter up right away and see what he could do. Very soon after that, as near as I can remember, it was the afternoon of that same day, he made some drawings and showed them to me. I, not being an expert on matters of that kind, I looked them over however, and suggested that he take them down and submit them to Mr. Webster, which he did. I remember talking it over with him, possibly the following day, and he stated that Mr. Webster was very much interested, and that he suggested going ahead and making a magneto along the line suggested in these drawings. Very soon after that the magneto was completed and tested out and seemed to give satisfaction, not only to the Webster

Co. but also to the Harvester Co., those of them that saw it.

Q 4. I hand you herewith a drawing marked in this case "Kane's Exhibit No. 7" and will ask you if you recognize the same.

A I have examined this drawing and recognize it as the drawing that I first saw and the one that I refer to.

Q 5. I show you a pamphlet marked "Kane's Exhibit No. 1" and will ask you to state what that shows if you know.

39013-90

2-Maurice Kane.

(Endorsed) Nov 7 1918

660 A I have looked over this pamphlet and examined the drawings referred to and recognize in this magneto the one that was made prior to the adoption of the E. J. Kane device; also as the magneto that gave so much trouble in the country, which was afterwards discarded and the Kane type of magneto substituted therefor.

Q 6. **(Did you ever see)* Were you ever present at a magneto test at the Fifteenth and Western Ave. plant of the Webster Mfg. Co.?

A Yes, I remember some time after these drawings were made they stated that they had a magneto completed and ready for test, and wanted somebody from the Harvester Co. to go there and see it in operation. As Manager of the Experimental Department of the Harvester Co. I went and there were also present from the International office Mr. Cavanaugh, who was my assistant in the Experimental Department, and Mr. John F. Stewart, who had charge of the patent work for the Harvester Co. Those are the only ones that I remember being there from the main office of the Harvester Co.

Q 7. Do you remember whether any employes of the Webster Mfg. Co. were present?

A Yes. There were my recollection Mr. Webster was there and E. J. Kane and some others, but I cannot recall their names.

Q 8. When did this test occur, as nearly as you can remember?

A I can't just exactly give the date, but I should say it was possible a month after I saw those original drawings.

39013-91

3-Maurice Kane

(Endorsed) Nov 7 1918

661 Q 9. At the time you witnessed these tests were you

*Matter in italics in parentheses, stricken out in original transcript.

informed as to who was the inventor or designer of the apparatus undergoing test?

A At the time that I went to see this it was generally understood who the designer was from the drawings that I saw and the magneto, the general understanding at our office where the drawings were submitted, all seemed to understand that E. J. Kane was the party. That didn't seemd to be questioned at all. Mr. Webster and the Superintendent of the International Harvester Co. at Milwaukee, Mr. Waterman, seemed to thoroughly understand that E. J. Kane was the inventor and designer of this particular type of magneto. In those early days nobody seemed to question that at all.

Q 10 I hand you herewith a pamphlet marked in this case "Kane's Exhibit No. 2" and will ask you to state what it shows, if you know?

A This shows the magneto as designed by E. J. Kane, made by the Webster Mfg. Co., and put out by the International Harvester Co. in large quantities since 1909.

Q 11 Do you know who issued this pamphlet?

A This pamphlet was issued by the International Harvester Co. of America. I remember this pamphlet very well as all pamphlets of, this kind were submitted to the Department of which I had charge for its approval before they were sent out, and I find in looking over this catalogue it is dated September 21, 1909. It is customary for the Harvester Co. in issuing pamphlets of this kind to print the date on so that 39013—92 4—Maurice Kane

(Endorsed) Nov 7 1918

662 their customers in the country in ordering extra parts can tell when the machine was built.

Q 12 I show you herewith a piece of apparatus marked "Kane's Exhibit No. 6" and will ask you to state what it is if you know?

A In looking over this magneto I recognize it as the one put out by the International Harvester Co. in 1909 and after.

Q 13 Are you acquainted with Mr. John L. Milton?

A Yes, Quite well. I met Mr. Milton when the Harvester Co. began using the magneto in connection with their engines. I couldn't give the exact date, but I know it was about that time.

Q 14. Did Mr. Milton ever intimate to you that he considered himself and that your son the inventor of the magneto construction exemplified in Kane's Exhibit No. 6?

A No sir. He never intimated anything of the kind.
Which was all of the testimony given by the witness Maurice Kane.

MAURICE KANE

39013—92

5—Maurice Kane

(Endorsed) Nov 7 1918

663

UNITED STATES PATENT OFFICE.

Edmund Joseph Kane

vs.

John L. Milton

} Interference No. 39,013.
}

NOTARIAL CERTIFICATE.

State of Illinois }
County of Cook } ss:

I, Mary A. Cook, a Notary Public in and for the County of Cook, and State of Illinois, do hereby certify that the foregoing depositions of Edmund Joseph Kane and Maurice Kane were taken on behalf of the party Edmund Joseph Kane in pursuance of the Notice hereunto annexed before me at 1315 Monadnock Block, Chicago, Illinois, on the 23d day of October 1916, that said witnesses were by me duly sworn before the commencement of their testimony; that the testimony of said witnesses was written out by Miss Kathleen W. Hutton in my presence; that the opposing party was not present nor represented by counsel during the taking of said testimony; that the testimony was commenced at two o'clock P. M., on the 23d day of October 1916, and was concluded at five twenty o'clock on the same day; that each deposition was read by the witness giving it before the witness signed the same; that I am not connected by blood or marriage with either of said parties, nor interested directly or indirectly in the matter in controversy.

In Testimony Whereof, I have hereunto set my hand
39013—93

(Endorsed) Nov 7 1918

664 and affixed my seal of office at Chicago in the said County
this 23d day of October 1916.

MARY A. COOK

Notary Public.

(Seal)

My comm. expires April 16, 1920

39012—94

(Endorsed) Nov 7 1918

665

UNITED STATES PATENT OFFICE.

Edmund J. Kane }
versus } Interference No. 39013
 John L. Milton }

I hereby certify that the within deposition of Edmund Joseph Kane, Maurice Kane and Towner K. Webster, relating to the above-entitled interference, taken before me were sealed up and addressed to the Commissioner of Patents by me this 18th day of December, 1916.

(Kane Exhibit No. 7—Enclosed)

MARY A. COOK
Notary Public.

To the Commissioner of Patents
 Washington D. C.

(In the margin):

Williams, Bradbury & See
 1315 Monadnock Block
 Chicago

39013—95

(Endorsed) Nov 7 1918

666

UNITED STATES PATENT OFFICE.

Edmund Joseph Kane }
vs. } Interference No. 39,013.
 John L. Milton }

STIPULATION

Inasmuch as it has been impossible heretofore to secure the testimony of Towner K. Webster, Sr., on behalf of the party Edmund Joseph Kane, and whereas said Towner K. Webster, Sr., is now available and ready to testify, and whereas the parties hereto are desirous that the testimony of said witnesses be taken without resetting the times for taking testimony and final hearing, it is hereby stipulated and agreed by and between counsel for the parties hereto that the testimony of said Towner K. Webster, Sr., may be taken on Tuesday, November 28, 1916, before Mary A. Cook, or other competent officer, the testimony of said Towner K. Webster to have the same force and effect as if the same had been taken

before the 30th day of October 1916, that is, the time set for the testimony in chief of the party Kane to close.

WILLIAMS & BRADBURY
Attorneys for Kane.
LYNN A. WILLIAMS,
Attorney for Milton.

Chicago, Nov. 28-1916.
39013—97

667

UNITED STATES PATENT OFFICE.

Edmund Joseph Kane }
vs. } Interference No. 30,013.
John L. Milton }

Testimony taken on behalf of the party Edmund Joseph Kane this 28th day of November 1916, at ten-thirty o'clock A. M., before Mary A. Cook, Notary Public, in and for the County of Cook and State of Illinois, at the office of Williams, Bradbury & See, 1315 Monadnock Block, Chicago, Illinois.
Present:

Albert G. McCaleb on behalf of Kane.

TOWNER K. WEBSTER, being called on behalf of the party Edmund Joseph Kane being first duly sworn on oath testifies as follows in answer to interrogatories propounded by counsel for Kane.

Q 1. Please state your name, age, residence, and occupation.

A. My name is Towner K. Webster, legal age; Evanston, Illinois; President of the Webster Electric Company.

Q 2. With what business were you connected during the year 1909?

A. I was President of the Webster Mfg. Co.

Q 3. Where was the Webster Mfg. Co. located at that time?

Street

A. Fifteenth/and Western Avenue, Chicago.
39013—98

(Endorsed) Nov 7 1918

668 Q 4. Was the Webster Mfg. Co. engaged in the manufacture of low tension ignition magnetos at that time?

A. It was.

Q 5. Will you describe, generally, the type of ignition apparatus manufactured by the Webster Mfg. Co., during the early part of 1909?

A. It was a straight bar inductor magneto of the oscillating type. The magneto was designed to be mounted on a stud on an engine cylinder and was used in connection with make and break electrodes. The electrodes were operated through the agency of a rod extending from the magneto to the movable electrode arm.

Q 6. In this type of apparatus to which you have referred was it possible to remove the magneto without removing the electrodes and their plug and vice versa.

A. It was. Other than the operating link there was no mechanical connection between the magneto and the electrodes.

Q 7. I hand you herewith a pamphlet which has been marked "Kane's Exhibit No. 1" and will ask you to state what is shown thereon if you know?

A. This pamphlet shows the form of low tension ignition mechanism to which I have referred, the magneto being illustrated upon an International Harvester engine.

Q 8. Who was the principal purchaser of this form of apparatus?

A. The International Harvester Company.

Q 9. Was this form of apparatus entirely satisfactory?

A. No. It was not. We received various complaints from the officials of the International Harvester Company and 39013-99

-3-

(Endorsed) Nov 7 1918

669 I and the other officials in charge of the business of the Webster Mfg. Co. came to the conclusion that a new and better type of apparatus should, if possible, be designed.

Q 10. What form of ignition, if any, followed the one which you have stated did not exactly comply with the requirements of the International Harvester Company?

A. The Webster Mfg. Co. adopted and commenced the manufacture of a self-contained form of apparatus wherein the magneto was mounted directly upon an integral plug and bracket and wherein the movable electrode arm was engaged and operated directly by a yoke on the magneto shaft.

Q 11. Please state as near as you can the circumstances surrounding the development of this self-contained type of ignition apparatus to which you have referred.

A. It having been called to my attention, the defects of the

magneto which was located by means of a stud or attached to a stud on a cylinder, I called in two of our draftsmen and employees, Mr. Gerald Chiville and Mr. E. J. Kane and suggested that they draw up an improved design which would overcome the (*manifest*)* defects in the other design. When these two gentlemen presented their ideas a short time afterwards the design invented by Mr. Kane was manifestly superior to all the others and we adopted the same. The design submitted by Mr. Kane was of the self-contained type to which I have referred in a previous answer.

Q 12. After Mr. Kane had submitted his design and after it had been accepted by the Webster Mfg. Co., as you have explained, what steps, if any, were taken toward embodying Mr. Kane's ideas in operative form?

A. As near as I can recollect the manufacture of 39013—100

—3—

(Endorsed) Nov 7 1918

670 this machine in its first and preliminary form was turned over to Abbott Munn who was one of our employes and the patterns and sample machine was made.

Q 13. Was said sample machine satisfactory in its operation.

A. This machine was found to be a great improvement over the former design and resulted in our receiving large orders from the International Harvester Company.

Q 14. Prior to the time Mr. Kane submitted his design to you had you ever seen or heard of a low tension magneto construction of the unitary type, that is, one wherein the magneto was mounted on an integral plug and bracket and the movable electrode arm operated directly from the magneto rotor shaft as you have explained?

A. No.

Q 15. I hand you herewith a pamphlet which has been marked "Kane's Exhibit No. 2" and will ask you to state what is shown on pages 4 and 5 thereof if you know?

A. This is the type of apparatus embodying Mr. Kane's design which was manufactured in large numbers for the International Harvester Company beginning in the fall of 1909 and continuing for some considerable time thereafter.

Q 16. As near as you can recollect when did Mr. Kane submit his design to you and by what means to you fix the date?

*Matter in italics in parentheses, stricken out in original transcript.

A. The magneto business was moved to Tiffin, Ohio, in the early fall of 1909, as near as I can recollect in August, and Mr. Kane's design was submitted some considerable time prior to that time. It must have been some months before we went to Tiffin because considerable development work was
39013—101

—4—

(Endorsed) Nov 7 1918

671 done at the Chicago plant.

Q 17. I show you a piece of apparatus marked "Kane's Exhibit No. 6" and will ask you to state what it is, if you know?

A. This is the form of apparatus illustrated in the pamphlet "Kane's Exhibit No. 2" and is the form of apparatus which was designed by Mr. Kane and manufactured by the Webster Mfg. Company and placed upon the market by the International Harvester Company.

Q 18. Do you know what has become of the first machine of the Kane type constructed by the Webster Manufacturing Company?

A. I do not.

Q 19. I notice that the pamphlet "Kane's Exhibit No. 5" bears the legend "Milton Magneto." Can you explain why this form of apparatus was designated by that name?

A. The magneto proper was given a trade name of "The Milton" and when we adopted the new form of attaching it to an engine the name was not changed. Mr. Milton was the inventor or designer of the tri-polar type of inductor magneto and he has patents on it. This form of magneto was used in connection with Mr. Kane's improvements.

Q 20. Who attended to the details with respect to obtaining patents on magneto designs developed by employes of the Webster Mfg. Co.?

A. The Webster Mfg. Co. had various patent attorneys and the applications were, of course, filed by them. I kept in general touch with the patent matters but the matter of signing the papers and the names in which applications were to be filed was left largely up to our engineer Mr. John L. Milton who had a rather free hand in these matters.

39013—102

—5—

(Endorsed) Nov 7 1918

672 Q 31. As near as you can recollect what were Mr. Milton's duties during the year 1909?

A. Mr. Milton was chiefly employed in improving and designing a high tension magneto.

Which was all of the testimony given by the witness Towner K. Webster.

TOWNER K WEBSTER

(Endorsed) Nov 7 1918

673

UNITED STATES PATENT OFFICE.

Edmund Joseph Kane }
 vs. } Interference No. 39,013.
John L. Milton. }

NOTARIAL CERTIFICATE

State of Illinois }
County of Cook } ss:

I, Mary A. Cook, a Notary Public in and for the County of Cook, and State of Illinois, do hereby certify that the foregoing deposition of Towner K. Webster was taken on behalf of the party Edmund Joseph Kane in pursuance of the stipulation hereunto annexed before me at 1315 Monadnock Block, Chicago, Illinois, on the 28th day of November 1916, that said witness was by me duly sworn before the commencement of his testimony; that the testimony of said witness was written out by Miss Kathleen W. Hutton in my presence; that the opposing party was not present nor represented by counsel during the taking of said testimony; that the testimony was commenced at ten-thirty o'clock A. M., on the 28th day of November 1916, and was concluded at eleven-fifteen o'clock on the same day; that the deposition was read by the witness before he signed the same; that I am not connected by blood or marriage with the parties, nor interested directly or indirectly in the matter in controversy.

In Testimony Whereof, I have hereunto set my hand and affixed my seal of office at Chicago in the said County this 28th day of November 1916.

MARY A. COOK
Notary Public.

39013—104

(Endorsed) Nov 7 1918

674

UNITED STATES PATENT OFFICE

Edmund Joseph Kane
vs.
John L. Milton

} Interference No. 39,013.

STIPULATION

It appearing to counsel for the parties hereto that Gerald D. Chiville, whom the party Kane had intended to call on his behalf, has left Chicago, Illinois, and is now somewhere in California, and that it is practically impossible to secure the deposition of said Gerald D. Chiville before the date set for final hearing in the above entitled interference, it is hereby stipulated and agreed by and between counsel for the parties hereto that the instrument hereunto annexed is a duplicate original of an affidavit executed by the said Gerald D. Chiville on May 12, 1916. It is hereby stipulated that said affidavit may be used with the same force and effect as if the statements therein contained had been made in answer to interrogatories propounded by counsel.

It is furthermore stipulated that said Gerald D. Chiville if called as a witness on behalf of Kane would testify identically in accordance with the statements made in said affidavit.

It is furthermore stipulated that the copy of Milton patent No. 1,096,048 and the drawings of Kane's applications Serial Nos. 541,428 and 2097 referred to by said Gerald D. Chiville in his affidavit aforesaid were true and correct copies of said patent and application drawings.

WILLIAMS & BRADBURY
Attorneys for Kane.
LYNN A. WILLIAMS
Attorney for Milton.

Chicago, Oct 20, 1916
39013—105
(Endorsed) Nov 7 1918

675

AFFIDAVIT
OF
GERALD D. CHIVILLE

Regarding Interference Between Milton and Kane
As to Inventorship of Certain Magneto Construction.

State of Illinois }
County of Cook } ss:

GERALD D. CHIVILLE, being duly sworn, says:

I am a resident of Chicago, Illinois, residing at 3449 Elaine Court, and am engaged in the care and operation of automobiles at 1442 North Dearborn Street. I know of the Webster Electric Company of Racine, Wisconsin, and am familiar with the oscillating inductor magneto manufactured and sold by the Webster Electric Company.

In the latter part of 1908 or the early part of 1909 I entered the employ of the Webster Manufacturing Company at Chicago, Illinois, which was then engaged in the manufacture of oscillating magnetos. The business of this company early in 1909 was taken over and continued in the same place by the Hertz Electric Company, which later changed the name to the Webster Electric Company, this being the company now located at Racine. In or about July 1909 and shortly following July, the company moved its magneto business from Chicago to Tiffin, Ohio, and I went to Tiffin and continued my work
A. G. M. there, leaving the employ of the company about
N. P.—August 1911, since which time I have had no connection whatever with the company.

When I entered the employ of the Webster Manufacturing Company in Chicago in the latter part of 1908 or early in 1909, John L. Milton was in general charge of the engineering work connected with the magneto business, Abbott Munn was in direct charge of the "experimental work, Edmund J. Kane, was in

39013—106

(Endorsed) Nov 7 1918

676

the employ of the company working as salesman and also in experimental and drafting work. Mr. Milton and I were devoting most of our time to high tension magnetos, while Mr. Kane devoted most of his attention to low tension magnetos.

When I entered the employ of the company and until some time in the spring or early summer of 1909 the company was manufacturing a low tension magneto, in which the magneto was attached to a boss on the side of the engine cylinder, and an arm on the inductor was connected with an arm on the movable contact shaft by a long rod or link.

In the spring of 1909 Mr. T. K. Webster, Sr., the president of the company, asked Mr. Kane and me to see if we could not design some unitary structure by which the spark plug carrying the contacts and also the inductor generator could be mounted together on a single support, so that they could be removed from the engine and replaced without affecting the adjustment between them. I recall that Mr. Webster told Mr. Kane and me to take a few days off from our other work, if necessary, and work independently of each other on this design at home. To the best of my recollection I had never before heard any suggestion of such a unitary structure nor of any means for operating the movable contact except by a link pivoted to arms on the contact shaft and on the inductor shaft.

A few days later Mr. Kane and I both submitted our design. I produced a design with the magneto supported above the plug, but my design was rejected. Mr. Kane submitted a drawing showing a construction in which the magneto was supported out beyond the end of the plug by a bracket or bearing integral with the spark plug. The inductor shaft carried a yoke having an arm to be struck by a rod driven by the engine, thus tripping the inductor which was returned to normal position by springs secured to the yoke. An arm on the movable contact shaft carried an adjustable screw which

677

was struck by the curved surface of one arm of the yoke when the yoke snapped back. A light spring tended to hold this adjustable screw in contact with the yoke.

To the best of my recollection it was about April 1909 that Mr. Kane and I were working on this proposition. I have examined a printed copy of patent No. 1,096,048, issued May 12, 1914, to John L. Milton, also the drawings of the Kane patent applications Serial No. 541,428 and Serial No. 2097. The Milton patent and the Kane application drawings each illustrate the construction which, to the best of my recollection and belief, is the construction designed by Mr. Kane as aforesaid.

The construction which Mr. Kane designed as aforesaid was submitted to the proper authorities including, I believe, Mr. Webster and Mr. Milton, and was accepted, and some time afterward working drawings of this construction were made and devices in accordance therewith were built, and their manufacture and sale by the company was thereafter continued, the older type before referred to being discontinued. This change from the old type to the Kane type occurred some months before the company moved to Tiffin, Ohio. To the best of my knowledge no such construction as that designed by Mr. Kane had been suggested or designed by anyone prior to its production by Mr. Kane.

GERALD D. CHIVILLE

Subscribed and sworn to before me this 13th day of May, A. D. 1916.

ALBERT G. McCALEB
Notary Public.

39013—108

—3—

(Endorsed) Nov 7 1918

448

Defendants' Exhibit No. 49.

678

39013—35,

W. F.
2—298

Address only the Commis-
sioner of Patents, Wash-
ington, D. C.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

December 20, 1916.

| | | |
|--------------------------------------|---|---|
| In the Matter of the Interference of | } | Before the Exam- iner of Interfer- ences No. 39,013. |
| Kane | | |
| <i>vs.</i> | | |
| Milton | | |

and

You are hereby informed that the testimony, exhibits, (*and printed record*)* in behalf of Edmund J. Kane have been received and filed.

Very respectfully,

W. F. WOOLARD,
Chief Clerk

Edmund J. Kane, c/o
Williams & Bradbury,
720 Monadnock Block,
Chicago, Ill.

39013—110

(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

679

#39013—36.

UNITED STATES PATENT OFFICE

(Rubber Stamp) Docket Clerk Dec 26 1916 U S Patent Office

Edmund Joseph Kane
 vs.
John L. Milton } Interference No. 39013

Testimony & Exhibits for Kane *infra* and Section 28,

NOTICE

1315 Monadnock Block,
Chicago, Illinois.

Lynn A. Williams, Esq.,
1315 Monadnock Block,
Chicago, Ill.

Dear Sir:

Please take notice that on Friday, October 20, 1916, beginning at 1:30 P. M., we shall proceed to take testimony in behalf of the party Kane at the office of the Webster Electric Company, Racine, Wisconsin, before James Norton Bour, Notary Public in and for the County of Racine and State of Wisconsin. Under this notice we expect to examine Abbott Munn, Arthur Charles Kleckner and Ernest Bruce, all of Racine, Wisconsin.

You are invited to attend and cross examine the witnesses produced.

Respectfully,

WILLIAMS & BRADBURY
Attorneys for Kane.

Chicago, Ill.,
October 17, 1916.

Due and timely service of the above notice is hereby acknowledged this 17th day of October, 1916

LYNN A. WILLIAMS
Attorney for Milton.

39013—109

(Endorsed) Nov 8 1918

680

UNITED STATES PATENT OFFICE

Edmund Joseph Kane }
v. } Interference No. 39,013.
John L. Milton. }

Testimony taken on behalf of the party Edmund Joseph Kane this 20th Day of October, 1916, beginning at 1:30 P. M., before James Norton Bour, Notary Public, in and for the County of Racine, State of Wisconsin, at the office of The Webster Electric Company, Racine, Wisconsin.

Present:

Albert G. McCaleb on behalf of Kane.

ABBOTT MUNN the first witness called in behalf of the party Kane, being first duly sworn on oath, testifies as follows in answer to interrogatories propounded by counsel for Kane.

Q 1— Please state your name, age, residence and occupation.

A— James Abbott Munn — 55 — Racine, Wisconsin machinist.

Q 2— By whom are you employed?

A— Webster Electric Company

Q 3— How long have you been in the employ of the Webster Electric Company?

A— Since The Webster Electric Company's inception. Formerly employed by the Webster Manufacturing Company, then by The Hertz Electric Company, name of which was later changed to The Webster Electric Company.

Q 4— By whom were you employed and where were you located in the early part of 1909.

A— Webster Manufacturing Company, 15th & Western Ave Chicago, Illinois.

39013—110 —Albert Munn—

(Endorsed) Nov 7 1918

681 Q 5— Was The Webster Mfg. Company manufacturing ignition magnetos at that time?

A— Yes.

Q 6— Please state briefly what kind.

A— We were manufacturing ^A*(Type "G") Magneto with separate igniter plug, connection made by a link.

Q 7— I hand you a pamphlet wherein is illustrated a piece of apparatus and will ask you if you know what it is.

A— Yes, this is the magneto that we were making at that time with link connection to plug—a Tri-Polar Oscillator.

Q 8— When you say that in the magneto shown in this pamphlet there was a link connection to the plug, do you mean that the link extended from the movable or oscillatory part of the magneto to the movable spark electrode supported by the plug?

A— Yes.

Q 9— In this type of machine was there any connection between the magneto and the plug or plug electrode, other than the link you have referred to?

A— No, that is, none other than the electrical wire connection.

Q 10— How long did the Webster Manufacturing Company continue to manufacture the type of apparatus shown by this pamphlet?

A— Until the self-contained plug ^A*(was) took its place, which ^A*(was Q 11) self-contained plug was developed and put on the market about the time the firm moved to Tiffin, Ohio.

By Mr. McCaleb—The pamphlet referred to by the witness is offered in evidence and the Notary Public is requested to mark the same "Kane's exhibit Number One—Pamphlet illustrating link type machine of 1909."

Q 11— I assume that the term "self-contained plug" is a shop name for some particular type of ignition apparatus. If so, will you kindly explain in general terms the construction of this apparatus and also explain how it differed from the construction shown in Kane's exhibit Number One?

the

A— In the self-contained type/ magneto is mounted on the plug itself, the oscillating member striking a arm on the 39013—111

—Abbott Munn—

(Endorsed) Nov 7 1918

the proper moment; The supporting bracket for the magneto were

and the plug itself/ formed in one casting. In the original construction **(the)* which is exemplified in Exhibit One, the movable electrode arm is actuated by a link or rod reaching from the magneto to the plug, the two being mounted on separate brackets. In the self-contained type the movable electrode is struck and opened by an arm on the moving shaft of the magneto.

Q 12— I hand you herewith a pamphlet and calling your attention particularly to illustration Numbers Four, Five and Six, appearing on pages Four and Five thereof, ask you to state what these illustrations show if you know.

A— This is the apparatus which followed in construction that shown in Exhibit One.

Q 13— You mean, do you, that the apparatus shown in Illustrations Four, Five and Six was placed upon the market by your employer after it had ceased to manufacture and sell the construction shown in Kane's Exhibit Number One?

A— Yes.

Q 14— What was your position with The Webster Manufacturing Company at the time this self-contained type of apparatus, to which you have referred, was placed upon the market?

A— Foreman of the Experimental Department.

Q 15— I hand you herewith a copy of patent to John L. Milton Number 1,096,048, and ask you if you recognize the apparatus shown on the patent drawings.

we manufactured

A— Yes. This is the construction/ **(worked out)* about the time we moved to Tiffin, Ohio.

Q 16— I hand you herewith a copy of the drawing of the Kane application involved in this interference, and will ask you if you know what it illustrates.

A— Yes, it is the construction we manufactured about the time we went to Tiffin, Ohio, and the same is shown in the Milton **(application for)* patent.

39013—112

—Abbott Munn—

(Endorsed) Nov 7 1918

683

—4—

By Mr. McCaleb—The pamphlet referred to by the witness in his answers to Questions Twelve and Thirteen is

*Matter in italics in parentheses, stricken out in original transcript.

offered in evidence, and the Notary is requested to mark the same "Kane's Exhibit Number Two—Pamphlet Illustrating Self-Contained Construction of 1909."

The copy of the Milton patent referred to by the witness **(is answered)* in his answer to Question Fifteen, is offered in evidence and the Notary is requested to mark the same "Kane's Exhibit Number Three—Copy Milton Patent Shown to Munn."

The copy of the Kane application drawing referred to by the witness is offered in evidence and the Notary is requested to mark the same "Kane's Exhibit Four—Copy Kane Drawing shown to Munn."

Q 17— I notice that both of the pamphlets to which you have referred, that is, Kane's Exhibits Numbers One and Two, bear the name of the International Harvester Company of America. Can you explain this?

A— The International Harvester Company ^{was} **(were)* our largest customer at that time, and these pamphlets illustrate our magnetos as attached to their engines. These pamphlets were evidently put out by them.

Q 18— When did you first hear of the magneto construction shown in Kane's exhibit Number Two, that is, the construction wherein the bracket which supports the magneto is formed integral with the plug carrying the electrodes, and wherein the movable electrode arm is operated by being engaged by a member carried with the oscillating or movable part of the magneto.

A— To the best of my recollection, some four or five months before we moved to Tiffin, Ohio. This construction was explained to me by Edmund Joseph Kane.

Q 19— When did you go to Tiffin?

A— August 13th, 1909.

Q 20— By whom was Mr. Kane employed at the time he explained this construction to you?

A— Webster Manufacturing Company.

Q 21— What were **(were)* Mr. Kane's duties at that time?

A— Our factory was at the corner of 15th and Western Avenue Chicago, and I worked on a bench on the fifth floor 39013—113

—Abbott Munn—

(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

684

—5—

of what they called the new building. Edmund J. Kane was also in the employ of the Company and worked with me on the fifth floor in experimental work. In a room partitioned off on the fifth floor, which was really a stockroom, there was a desk at which Kane did some drawing.

Q 22— Please explain as fully as you can the circumstances surrounding the disclosure or explanation which you say Mr. Kane made to you.

A— About four or five months, as nearly as I can remember, before we moved the magneto plant to Tiffin, Ohio, Edmund J. Kane came to me and said that he believed that he could work out a self-contained magneto construction. That is, that he could devise a construction in which the spark plug and the magneto itself could be mounted together in one unitary structure so that they could be installed on an engine or removed without separating them. I told him he had better go ahead, and see what he could do along this line. Very shortly after this Kane did some drawing in designing this new construction at the desk in the stockroom on the fifth floor of the factory, and I watched him from time to time, as he proceeded with the drawings. Mr. Milton was away a great deal of the time, and I don't remember whether he saw Kane doing this drawing or not, or whether he made any comment on this construction or knew of it at the time it was being designed by Kane or not. A few days after Kane told me that he thought he could work out this self-contained construction, he showed me a complete **(working)* drawing which showed a construction substantially like that shown on Pages Four and Five of the International Harvester

shown
pamphlet— Kane's Exhibit Two, and also **(noted)* in Kane's drawings you showed me a few minutes ago.

Q 23— In your last answer you refer to Mr. Milton. Who was he, and what was he doing at the time Mr. Kane explained his self-contained arrangement to you?

A— Mr. Milton was in general charge of the Magneto Experimental Department, and my direct superior.

Q 24— Where did Mr. Milton make his headquarters at that time?

A— In the main office of the Company;—on the first floor of the main building, 15th and Western Avenue, Chicago. As

*Matter in italics in parentheses, stricken out in original transcript.

I told you before, Kane and I were on the fifth floor of the new building.

39013—114

—Abbott Munn—

685

—6—

Q 25—I hand you a large manila sheet with some pencil drawings thereon, and will ask you if you ever saw this drawing before.

A— Yes, it looks exactly like the one Kane showed me, and which I saw him working on.

Q 26— Do you mean the **(working)* drawing which in your answer to Question Twenty-Two you say was shown to you by Mr. Kane some four or five months before the magneto **(business)* plant was moved to Tiffin?

A— Yes.

at the time Mr. Kane first showed it to you

Q 27— Did you understand the construction and operation of the apparatus shown on this drawing?

A— Yes. Immediately after receiving the drawing, I had patterns and castings made and machined them up and finished up a combined bracket and plug similar to that shown in the drawing.

**(Q 28— Did you follow the exact details of this drawing)*

Q 28— Do you know what became of the first combined bracket and plug mentioned in your last answer?

A— After the plug was completed and tried out, fully equipped with a magneto, on an engine having a push rod, I don't know what became of it.

Q 29— When the bracket and plug was completed and tried out, fully equipped with the magneto, did the combination operate successfully?

A— It did, perfectly.

Q 30— Were you present at these tests?

A— Yes, I conducted them personally.

Q 31— Who were present at these preliminary tests, as near as you can recollect?

Edmund Joseph

A— Mr./Kane, Mr. Cavanaugh, Mr. Joseph Kane's father, and myself. Those are all that I remember. There might have been others, but I don't remember.

Q 32— Do you remember ever having talked with Mr. Milton about this arrangement which Mr. Kane disclosed to you

*Matter in italics in parentheses, stricken out in original transcript.

and which you incorporated in the sample machine as you have just explained?

A— No, Possibly he did so, but I don't remember. I am absolutely certain that Mr. Milton did not say anything to me before Mr. Kane explained his idea to me.

39013—115

—Abbott Munn—

(Endorsed) Nov 7 1918

686

—7—

Q 33— How soon after this first sample was made and tested out did The Webster Manufacturing Company start to manufacture these devices for sale?

A— Some time before August, 1909, before we went to Tiffin, we began manufacturing magnetos for the International Harvester Company to go on brackets **(of this kind)* provided with integral plugs similar to sample we made up. We furnished magneto, inductor, shaft springs and spring arm, while they furnished the bracket and its integral plug.
and bracket

The plug/ as made by them included electrodes, electrode arm, contact screw and spring, all as shown in Kane' Exhibit Number Two.

Q 34— Did the Webster people continue to manufacture these devices for the International Harvester Company, as explained in your answer to Question Thirty-Three, after the plant was moved to Tiffin?

A— Yes. The majority of our output was taken after we moved to Tiffin. We sold them altogether a good many thousand, within a year or two, after we went to Tiffin.

Q 35— What was the name of the company after the plant was moved to Tiffin?

A— Hertz Electric Company, afterwards changed to The Webster Electric Company.

Q 36— Did the company continue to make any of the old link type machines of Kane's Exhibit Number One after the plant was moved to Tiffin?

A— I don't think so. Possibly there were a very few manufactured but if so the number was extremely limited.

Q 37— I show you a piece of apparatus and ask you if you know what it is?

A— **(The magneto is manufactured by us.)* Yes, the in-

*Matter in italics in parentheses, stricken out in original transcript.

was
tegral plug and bracket *(were) made by the International Harvester Company, and the rest by us.

Q 38— How does this apparatus differ, if at all, from that which Mr. Kane explained to you some time before you went to Tiffin, and which you incorporated in the sample machine?

A— There is no difference, except that it contains a cut-out arm which Mr. Kane's did not. Mr. Kane's arrangement had a different feature for cutting out the *(plug) spark, which was not on the bracket.

39013—116 —Abbott Munn—

(Endorsed) Nov 7 1918

687

—8—

Q 39— When was this apparatus made?

A— I can't say definitely—probably within a year or so after we went to Tiffin.

*(Q 40— Did Mr. Kane, that is, Mr. P. J. Kane, claim the arrangement shown on the drawing, Kane's Exhibit ever tell you that the self-contained construction was his invention)

Q 40— Did Mr. John L. Milton ever tell you that he was the inventor of the self-contained construction about which you have been testifying?

A— He never did.

Q 41— Was Mr. Milton, so far as you know, concerned at all in the development of this self-contained low tension oscillator construction?

A— The magneto itself was Milton's construction, but integral

the/ plug and bracket he had no hand in developing—certainly not before Kane told me of his idea. Kane also, as far as I know, was the only one who ever suggested that the yoke or spring arm open the electrodes direct by engaging an adjustable screw carried by the electrode arm.

Q 42— Are you acquainted with Mr. Emil Podlesak?

A— Yes, he *(came) entered the employ of the Webster Company after *(Q 43) Kane had designed this device. The name of the Company may have been Hertz Electric when Podlesak came.

By Mr. McCaleb—The Drawing referred to by the witness in his answers to Questions Twenty-five and Twenty-Six is offered in evidence and the Notary is requested to mark the

*Matter in italics in parentheses, stricken out in original transcript.

same "Kane's Exhibit Number Five—Kane's Manila paper Drawing."

The apparatus referred to by the witness in answer to Questions Thirty-Seven, Thirty-Eight and Thirty-Nine is offered in evidence and the Notary is requested to mark the same "Kane's Exhibit Number Six—International Harvester Machine."

Which was all the testimony given by the witness Abbott Munn.

J. A. MUNN

8

39013—117 —Abbott Munn—
(Endorsed) Nov 7 1918

688

—9—

ARTHUR CHARLES KLECKNER the next witness called in behalf of Kane, being duly sworn, on oath testifies as follows in answer to interrogatories propounded to him by counsel for Kane.

Q 1— Please state your name, age, residence and occupation.

A— Arthur Charles Kleckner, 26, Racine, Wisconsin, employed by The Webster Electric Company as Engineer.

Q 2— When did you enter the employ of the Webster Electric Company?

A— In August 1909.

Q 3— Where was the company located at that time?

A— At Tiffin, Ohio.

Q 4— Do you know how long the company had been located in Tiffin before you entered its employ?

A— They were in the process of moving from Chicago at the time I entered their employ.

Q 5— What was the company manufacturing at the time you entered its employ?

A— The Type "F" Oscillating Magneto for use on the International Harvester Company's engine.

Q 6— How, if at all, did the Type "F" magneto to which you have referred differ from the machine illustrated on pages Four and Five of the pamphlet which I now hand you, and which bears legend "Kane's Exhibit Number Two."

A— The pamphlet illustrates exactly the Type "F" magneto to which I have referred.

Q 7— Did The Webster Electric Company make the entire equipment at that time?

A— No, only the magneto proper, the igniter plug and operating mechanism being manufactured and furnished by the International Harvester Company.

Q 8— Did you ever see one of the complete units embodying the Type "F" magneto such as you testify is illustrated 39013—118

—A. C. Kleckner—

(Endorsed) Nov 7 1918

689

—10—

on Pages Four and Five of Kane's Exhibit Number Two?

A— Yes, I saw a number of these soon after entering the employ of The Webster Electric Company.

Q 9— Now I hand you a piece of apparatus which is marked "Kane's exhibit Number Six" ask you to state what it is if you know.

A— This is a Type "F" magneto, mounted on the igniter plug to which I have referred.

Q 10— Who was in charge of the plant at Tiffin when you entered the employ of the Webster Electric Company at Tiffin, Ohio?

A— At this time this Company was known as The Hertz Electric Company—T. K. Webster, Jr., was in charge although Emil Podlesak Was Works Manager, and in charge of the Experimental and Design Work.

Q 11— Do you know who invented the particular combination of parts including the Type "F" magneto, and plug and bracket as shown on Pages Four and Five of Kane's Exhibit Number Two, and exemplified by Kane's Exhibit Number Six?

A— No, but I was informed by Emil Podlesak and others/ in the employ of the company at the time, that this combination was invented by Mr. Joseph Kane.

Q 12— Did you know Mr. Kane at that time?

A— Yes, he was located at Tiffin.

*(Q 13—)

Which was all the testimony given by the witness, Arthur Charles Kleckner.

*(A. C. Kleckner.)

ARTHUR CHARLES KLECKNER.

39013—119

—A C Kleckner—

(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

ERNEST BRUCE the next witness called in behalf of Kane, being first duly sworn on oath testifies as follows in answer to interrogatories propounded by counsel for Kane:

Q 1— Please state your name, age, residence and occupation.

A— Ernest, Bruce, 40, Racine, Wisconsin—Superintendent of The Webster Electric Company.

Q 2— How long have you been employed by The Webster Electric Co.

A— Seven years last February.

Q 3— What was the name of the Company when you entered its employ.

A— Webster Manufacturing Company. It was changed to the name of The Hertz Electric Company and later to The Webster Electric Co.

Q 4— What sort of magneto was the Webster Electric Company putting upon the market when you entered its employ in February 1909?

A— The Company was making a low tension ignition magneto, or what we called the Type "D" which comprised a field frame consisting of two **(polar projections, each)* pole pieces each having three projections and a generating winding on the middle projection of each pole piece. The ends of the pole pieces were connected **(with)* by straight bar magnets. The magneto also comprised an inductor in the shape of a Maltese Cross which was mounted on a shaft between the pole pieces, and was held in a certain position by a pair of large springs. The shaft which carried the inductor was provided with a push finger so that a rod driven by an engine might engage the push finger to oscillate the inductor shaft and release it. This Type "D" magneto was sold by The Webster Manufacturing Company to the International
the

Harvester Company. The magneto being of/ **(a)* low ten-
make and break
sion type was used in connection with/ **(making brake)* electrodes. The International Harvester Company operated the
or rod

movable electrode by a link/ extending from the inductor to the movable electrode arm.

*Matter in italics in parentheses, stricken out in original transcript.

Q 5— I hand you a pamphlet marked "Kane's Exhibit Number One" and ask you to state what it illustrates if you know.

A— This pamphlet shows a magneto that looks just like the Type "D" machine made by The Webster Manufacturing Company at that time.

39013—120

—Ernest Bruce—

(Endorsed) Nov 7 1918

691

—12—

Q 6— What were your duties at the time you entered the employ of the Webster Manufacturing Company in 1909?

A— When I first entered the employ of the Company I started in on experimental work with high tension magnetos, but shortly afterward I became foreman of the manufacture of low tension magnetos, and went to Tiffin, Ohio when the plant was moved to Tiffin in the early Fall of 1909. The business was done in the name of the Hertz Electric Company **(shortly before and some time)* after the removal to Tiffin. Finally the name was changed to The Webster Electric Company.

Q 7— Was Mr. John L. Milton with the Webster Company when you entered its employ, in 1909?

A— Yes, sir. He was in charge of the Engineering work but was devoting most of his time to experimental work with high tension magnetos.

Q 8— Where did Mr. Milton have his office at that time?

A— He had a desk in the main office.

Q 9— Where was the main office?

A— On the first floor of the factory.

Q 10— Was Mr. E. J. Kane in the employ of the company at that time.

A— Yes, sir.

Q 11— What was Mr. Kane doing and where was he located in the Company's plant?

A— I think he was salesman among other things, but he had a drawing table up on the fifth floor of the factory where Abbott Munn was located.

Q 12— What was Mr. Munn doing at that time?

A— Munn was practically in charge of experimental work on magnetos of the low tension type, and E. J. Kane worked along with Munn although I do not know just what work he

*Matter in italics in parentheses, stricken out in original transcript.

did, although I understood he was a salesman, and helped remedy troubles with customers' magnetos.

Q 13— How long did the Webster Company continue to manufacture Type "D" magnetos of the type shown in Kane's Exhibit Number One.

A— Shortly before the magneto plant was moved to Tiffin, the Company manufactured a new machine Type "F".

Q 14— How did this Type "F" machine differ from the type "D machine."

A— The Type "F" was smaller than the Type "D" and 39013—121 —Ernest Bruce—

(Endorsed) Nov 7 1918

692

—13—

the magneto frame was rounded at its ends. This magneto was designed to be used upon an integral plug and bracket so that the magneto was supported from the plug on the bracket and so that the yoke or spring arm on the magneto shaft could make direct contact with an adjustable screw in a small arm on the movable electrode. The Webster Manufacturing Company made only the magnetos, as far as I remember, and the integral plug and bracket was made by the International Harvester Company. However, on one occasion before the factory was moved to Tiffin, I remember one equipped with integral plug and bracket of these magnetos/ being tried out at the Webster factory, before a group of visitors. I think that they were from the International Harvester Company, and that one of them was the father of Mr. E. J. Kane.

Q 15— I show you a piece of apparatus marked "Kane's Exhibit Number Six" and ask you to state what it is if you know.

A— That is the type "F" machine which we manufactured after dropping the Type "D". The manufacture of this machine was commenced before we went to Tiffin. This machine has the integral plug and bracket which I understood was manufactured by the International Harvester Company.

Q 16— Do you know who invented the combination of magneto and integral plug and bracket represented by the apparatus "Kane's Exhibit Six".

A— I do not.

*(Q 17—) testimony
Which was all of the/ *(witness) given by the witness,
Ernest Bruce.

39013—122 —Ernest Bruce—
(Endorsed) Nov 7 1918

ERNEST BRUCE

693

UNITED STATES PATENT OFFICE

Edmund Joseph Kane }
v. } Interference No. 39,013.
John L. Milton }

NOTARIAL CERTIFICATE.

State of Wisconsin, }
County of Racine. } ss

I, James Norton Bour, a Notary Public within and for the County of Racine and State of Wisconsin, do hereby certify that the foregoing depositions of Abbott Munn, Arthur Charles Kleckner and Ernest Bruce were taken on behalf of the party Edmund Joseph Kane in pursuance of the notice hereto annexed, before me at the office of the Webster Electric Company in the City of Racine, in said county, on the 20th day of October 1916; that said witnesses were by me duly sworn before the commencement of their testimony, that the testimony of said witnesses was written out by Miss Mabel Ferguson in my presence; that the opposing party was not present or represented by counsel during the taking of said testimony; that testimony was commenced at 1:30 P. M. on the 20th day of October 1916, and was concluded at 6:00 o'clock on the same day; that each deposition was read by the witness giving it before the witness signed the same; that I am not connected by blood or marriage with either of said parties, nor interested directly or indirectly in the matter in controversy.

In Testimony Whereof, I have hereunto set my hand and
39013—123
(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

694 affixed my seal of office at Racine in said county this 26 day of October, 1916.

JAMES NORTON BOUR,
Notary Public.

(Seal)

My commission expires March 23, 1919.

39013—124

(Endorsed) Nov 7 1918

695

UNITED STATES PATENT OFFICE

| | | |
|----------------|---|---------------------------|
| Edmund J. Kane | } | Interference No 39,013 |
| <i>versus</i> | | |
| John L. Milton | | |

I hereby certify that the within depositions of Abbott Munn, Arthur Charles Kleckner and Ernest Bruce, relating to the above-entitled interference, taken before me, were sealed up and addressed to the Commissioner of Patents by me this 21st day of December, 1916

JAMES NORTON BOUR,
Notary Public.

Exhibits:

| | | |
|-------|---------|------|
| Kanes | Exhibit | No 1 |
| " | " | No 2 |
| " | " | No 3 |
| " | " | No 4 |
| " | " | No 5 |

39013—126.

(Endorsed) Nov 7 1918

696

39,013—37.

W. F.
2—208

Address only
The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR
United States Patent Office
Washington

December 27., 1916.

In the Matter of the Interference of }
Milton } Before the Examiner of
vs. } Interferences.
Kane } No. 39,013.

and

You are hereby informed that the testimony, exhibits,
*(and printed record) in behalf of Edmund J. Kane have
been received and filed.

Very respectfully,

W. F. WOOLARD,
Chief Clerk.

Edmund J. Kane, c/o
Williams & Bradley,
#720 Monadnock Block,
Chicago, Ill.

6—1962

39013—127

(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

W. F.
2—208

Address only
The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

January 4, 1917.

| | |
|--------------------------------------|---|
| In the Matter of the Interference of | } Before the Examiner of Interferences. No. 39,013. |
| Kane | |
| vs. Milton | |

You are hereby informed that the **(testimony, exhibits, and)* printed record in behalf of Edmund J. Kane have been received and filed.

Very respectfully,

W. F. WOOLARD,
Chief Clerk.

Edmund J. Kane, c/o
Williams & Bradbury,
#720 Monadnock Block,
Chicago, Ill.

6—1962

39013—128

(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

721 TESTIMONY AND EXHIBITS FOR MILTON
(IN BOX)

39,013—40

UNITED STATES PATENT OFFICE

Edmund Joseph Kane }
 vs. } Interference No. 39,013.
John L. Milton }

(Rubber stamp) Docket Clerk Jan 11 1917 U. S. Patent
Office

STIPULATION

Inasmuch as John L. Milton, whose patent No. 1,096,048 is involved in this interference, has been unable to testify heretofore and whereas it appears that said John L. Milton is today in Chicago and is willing to testify, it is stipulated and agreed by and between counsel that the testimony of said John L. Milton may be taken today, Thursday, January 4, 1917, before Mary A. Cook, Notary Public, or other competent magistrate, the testimony thus given to have the same force and effect as if it had been given before the expiration of the time set for Milton's testimony to close.

WILLIAMS & BRADBURY
Counsel for Kane.

LYNN A. WILLIAMS
Counsel for Milton.

Chicago, Ill.,
January 4, 1917.
39013—129

(Endorsed) Nov 7 1918

722

UNITED STATES PATENT OFFICE

Edmund Joseph Kane }
vs. } Interference No. 39,013.
John L. Milton }

Testimony taken on behalf of the party John L. Milton this 4th day of January, 1917, beginning at 4:30 P. M., before Mary A. Cook, Notary Public, in and for the County of Cook, State of Illinois, at 1315 Monadnock Block, Chicago, Illinois.
Present: Albert G. McCaleb, on behalf of Milton.

JOHN L. MILTON, being called in his own behalf, after being duly sworn, on oath testifies as follows, in answer to interrogatories propounded by counsel.

Q. 1. Please state your name, age, residence and occupation.

A. John L. Milton; 41; Cleveland, Ohio; electrical engineer.

Q. 2. Are you the John Lewis Milton whose patent No. 1,096,048 is involved in this interference controversy?

A. I am.

Q. 3. Do you understand the construction and mode of operation of the device recited in the six claims of your said patent?

A. I do.

Q. 4. Will you please state in detail the circumstances surrounding your invention and development of the mechanism which forms the subject matter of these claims?

39013—130 —1—

(Endorsed) Nov 7 1918

723

John L. Milton

A. Prior to 1905 and during a part of 1905 I had been working with electrical ignition for internal combustion engines, principally of the stationary engine type, and had developed and experimented with what I thought to be new principles of ignition and which I later found was the subject of a group of patents that at that time was under the control of a man by the name of Curtain, who had effected a working license arrangement with the Webster Manufacturing Company in Chicago. At this particular time I was located in

New York and got in touch with Harry Alward who had done some work for this man Curtain and was the patentee of an inductor alternator for ignition purposes. This device had been offered to the public under the trade name of "Auto-Igniter" consisting of permanent magnets between which an iron disk revolved. One pole of the permanent magnet was bifurcated and had a coil or wire surrounding one of the divisions. The other pole of the magnet was plain. This device was more completely developed than the device that I had worked at. Mr. Alward informed me of the license arrangement above referred to. I made a trip to Chicago to call on Mr. T. K. Webster and explained my above given experience and effected a working arrangement with him for the selling and developing of this apparatus. At once I found that it had some serious mechanical defects. This started a long series of developments and experiments. Between this time and the development of the patent which is the subject of controversy I developed some four or five different magnetos and various methods of operating. This particular device is a direct result of some complaints made on some

39013—131

—3—

(Endorsed) Nov 7 1918

724

John L. Milton

of the earlier types that were in operation. One of my magnetos which had been in operation at the International Harvester Engine Works, Milwaukee, had been mounted by a Mr. Charles Longnecker so as to be operated by a reciprocating device. This magneto was a large square type carrying straight bar permanent magnets. This device was expensive and rather unsightly. The next step was to mount the magneto closer to the spark plug mechanism and get a direct instead of an indirect thrust on the magneto operating lever which was in turn connected to the spark mechanism by a yielding link or rod. Quite a number of these were put into operation and sold by the International Harvester Company, the principal trouble with this device being that the weight of the magneto would break off the boss which was cast on the cylinder wall. To effect a more secure mounting I made a number of efforts to mount the magneto directly on the spark plug.

According to my best knowledge and belief I conceived the subject matter of the claims in this case on or about the 15th day of August 1908, at which time I believe I started sketches

and drawings and followed this with various modifications, and finally got it in form for actual construction. The first models were tried out on the horizontal stationary International Harvester engine. After we had these samples working to our satisfaction we had Messrs. Cavanaugh, Kane and Stewart, of the International Harvester Company come out to the factory and exhibited the engine to them on the fifth floor. This resulted in our sending samples to their Milwaukee works for further test.

39013—132

—3—

(Endorsed) Nov 7 1918

725

John L. Milton

Q. 5. When, as nearly as you can recollect, was the first machine corresponding to the counts of this interference tested out?

A. I have before me a blue print, the tracing of which was made by Mr. C. D. Chiville and is dated July 15, 1909, which is the same print that I delivered to Mr. Lynn A. Williams in Detroit on October 6, 1915. This print shows the complete ignition device in the form in which it was delivered to the International Harvester Company as our standard product, and I should say that we made our first test and sent out our first machines some months prior to this. About this time the Webster Electric Company was formed and they were establishing their plant at Tiffin, Ohio. During the second week in August I was in Tiffin, Ohio, for two or three days on my way to New York, from which place I sailed for Europe about the middle of August, and this machine was left in what was then believed to be commercial form ready for general manufacture.

I have before me a photograph which I took with me to Europe in August 1909, on which I printed in pen and ink the following: "Milton Magneto, Confidential". This was done at the suggestion of Mr. Adams of the law firm of Marks & Clerk. I had copies made of this photograph and left them with a few of the English manufacturers. This notation was made on the photograph for reasons given by the patent attorneys, their instruction being that the patent had not been applied for in Great Britain. Very shortly after my arrival in London, Marks & Clerk started preparation of the British patent

39013—133

—4—

(Endorsed) Nov 7 1918

726

John L. Milton

application which was filed on October 28, 1909. Prior to my departure for Europe I had tools made by the V. & O. Press Company of Brooklyn, New York, for the production of this magneto. These were shipped to Europe together with a special V. & O. punch press for handling these tools about the time of my departure. I personally inspected these tools just before sailing. These tools and the machine were lodged with Messrs. Elliott Brothers at their Century Works in London, and active production was started on these magnetos prior to my return to America, which was in December of 1909.

The photograph and blue print to which reference has just been made are one and the same machine and built exactly in accordance with the claims of the Milton patent herein involved. The photograph referred to shows a horizontal type of International Harvester engine and shows very plainly the Milton magneto and some of the tripper mechanism.

By Mr. McCaleb: The blue print referred to by the witness in his last answer is offered in evidence and the Notary is requested to mark the same, "Milton's Exhibit No. 1, Blue Print of Tracing of July 15, 1909." The photograph referred to by the witness is offered in evidence and the Notary is requested to mark the same, "Milton's Exhibit No. 2, Photograph of Milton Magneto applied to International Harvester engine."

Q. 6. Have you any of your early sketches of the mechanism involved in this interference?

A. This work was done substantially eight years ago, during which time I have lived in Chicago, Louisville, Tiffin, Anderson, Detroit, and I am now living in Cleveland. As this case was issued into a formal patent I treated

39013-134

-5-

(Endorsed) Nov 7 1918

727

John L. Milton

it as a settled matter and did not make any particular effort to hold on to my early sketches. However, I still have some blue prints and data pertaining to some of my early work on ignition that was left at Louisville. This I have not examined for years and do not know exactly what is in it.

Q. 7. Will you please state the reason why you did not file an application in the United States on the invention in this

case until a year after the application for the same invention was filed in Great Britain?

A. For several months prior to my trip to England the subject of foreign rights had been under a serious and bitter discussion between the Webster Manufacturing Company, my associate, Mr. Walter C. Teagle, and myself. This brought about considerable estrangement between the personnel of the Webster Company and myself, and it was some months after I returned from Europe before we again started working together. During all of my connection with the Webster Company, which embraced this period, I had a patent contract with them and the applying for patents was a matter that was at the dictation of the Webster Company.

Q. 8. Please state whether you are acquainted with Mr. Edmund Joseph Kane, whose application is involved in interference with your patent.

A. Yes, I am acquainted with Mr. E. J. Kane.

Q. 9. Now, please state what, if anything, to your knowledge Mr. Kane had to do with the invention and development of the mechanism forming the subject matter of the claims involved in this interference.

39013—135

—6—

(Endorsed) Nov 7 1918

728

John L. Milton

A. During the summer of 1908 Mr. E. J. Kane was finishing a power boat in which he had mounted a gasoline engine. At the suggestion of his father he came out to the Webster Manufacturing Company, then situated at 15th and Western Ave., Chicago, and had a talk with me on the subject of ignition for his engine. We loaned him a magneto which he subsequently installed in his boat. During the Illinois State Fair held at Springfield in September of this same year Mr. Maurice Kane, father of Mr. E. J. Kane approached me on the subject of employing his son at the Webster Manufacturing Company on the electrical ignition work which I was then conducting and in which Mr. Kane, Sr., had manifested considerable interest. He stated that his son had just finished his course at school and he was anxious for him to get a knowledge of this kind of work. This conversation took place in the tent of the International Harvester Company at the Fair mentioned. Mr. E. J. Kane came to work for the Webster Company shortly after this time. He was employed for

making installations and carrying out instructions on development work which included some drafting. He made various applications of our magnetos to stationary engines and conducted tests. The invention as set forth in the claims of this Milton patent No. 1,096,048 are in no wise the product of any suggestions set forth by Mr. E. J. Kane or anyone else and I firmly believe myself to be the original inventor.

39013—136

—7—

(Endorsed) Nov 7 1918

729

John L. Milton

Q. 10. Will you please state why you have not given your testimony in this interference at an earlier date?

A. When I was first asked to give my testimony by Williams, Bradbury & Sec, we were just in the process of moving the entire factory and offices of the Motor Ignition & Devices Company to Cleveland, Ohio. This was later followed by the moving of my family and household effects which consumed a good deal of energy. Simultaneously with this work I had to do a great deal of very important traveling for my company. Following this I was ill and confined to the house for an extended period. I have not been actively connected with the Webster Manufacturing Company or the Webster Electric Company for at least five years. I have been completely occupied with business entirely separate and distinct from any Webster interest for the entire period that I have been away from them and had completely dismissed from my mind the apparatus and business affairs of the Webster Companies, and at the immediate moment I am giving this testimony by a chance appointment and did not come here prepared with any of my personal records. I may add that I am giving this testimony at the request of the attorneys for the Webster Electric Company, and that is necessarily hurried owing to the fact that we had a very short period in between appointments that pertain to my active business, and at this moment I am several minutes past due on my next appointment, immediately following which I am to catch my train for Cleveland, Ohio.

JOHN LOUIS MILTON

39013—137

—8—

(Endorsed) Nov 7 1918

730

UNITED STATES PATENT OFFICE

Edmund Joseph Kañe }
 vs. } Interference No. 39,013.
 John L. Milton }

NOTARIAL CERTIFICATE.

State of Illinois, County of Cook, ss.

I, Mary A. Cook, a Notary Public in and for the County of Cook, and State of Illinois, do hereby certify that the foregoing deposition of John L. Milton was taken on behalf of stipulation the party John L. Milton, in pursuance of the **(notice)* ^ hereunto annexed, before me, at 1315 Monadnock Block, Chicago, Illinois, on the 4th day of January, 1917; that said witness was by me duly sworn before the commencement of his testimony; that the testimony of said witness was written out by Miss Harriet A. Bookhagen in my presence; that the opposing party was not present nor represented by counsel during the taking of said testimony; that the testimony was commenced at 4:30 o'clock P. M., on the 4th day of January, 1917; that the deposition was read by the witness giving it before the witness signed the same; that I am not connected by blood or marriage with either of said parties, nor interested directly or indirectly in the matter in controversy.

In Testimony Whereof, I have hereunto set my hand and affixed my seal of Office at Chicago, in the said county, this 4th day of January, 1917.

MARY A. COOK

My commission expires April 10, 1920.

(Seal)

39013—138

(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

731

UNITED STATES PATENT OFFICE

Edmund J Kane }
 versus } Interference
John L. Milton } No. 39,013

D. O. C.

(Rubber Stamps) Mail Room Jan 11 1917 U. S. Patent Office. Docket Clerk Jan 11 1917 U. S. Patent Office.

I hereby certify that the within deposition of John A. Milton relating to the above entitled interference was taken, sealed up by me and addressed to the Commissioner of Patents this 8th day of January 1917.

MARY A COOK
Notary Public.

Exhibits:
Milton's Exhibit 1.
 " " 2.

(Endorsed) Nov 7 1918

39013—139

476

Defendants' Exhibit No. 49.

732

39013—41

W. F.
2—208

Address Only
The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR
United States Patent Office
Washington

January 12, 1917.

In the Matter of the Interference of

| | |
|------------|---|
| Kane | } Before the Examiner of Interferences. No. 39,013. |
| <i>vs.</i> | |
| Milton | |

You are hereby informed that the testimony, and exhibits,
**(and printed record)* in behalf of John L. Milton have been
received and filed.

Very respectfully,

W. F. WOOLARD,
Chief Clerk.

John L. Milton, c/o
Lynn A. Williams,
Monadnock Block,
Chicago, Ill.

39013—140

6—1962

(Endorsed) Nov 7 1918

* * * * *

*Matter in italics in parentheses, stricken out in original transcript.

740

39,013—43

W. F.
2—208

Address Only
The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR
United States Patent Office
Washington

January 26, 1917.

In the Matter of the Interference of

Kane }
vs. }
Milton }
 } Before the Examiner
 } of Interferences.
 } No. 39,013.

.....
You are hereby informed that the * (*testimony, exhibits and*)
printed record in behalf of John L. Milton have been received
and filed.

Very respectfully,

W. F. WOOLARD,
Chief Clerk.

John L. Milton, c/o
Lynn A. Williams,
Monadnock Block,
Chicago, Ill.

39013—141

6—1962

(Endorsed) Nov 7 1918

*Matter in italics in parentheses, stricken out in original transcript.

Final Hearing
February 16, 1917.

IN THE UNITED STATES PATENT OFFICE.

Kane v. Milton.

Patent Interference No. 39,013.

Magneto Generator.

Application of Edmund Joseph Kane filed January 14, 1915,
No. 2097, division of No. 541,438, filed February 2, 1910.
Patent of John Lewis Milton, No. 1,096,048, issued May 12,
1914, application filed October 28, 1910, No. 589,564.

Messrs. Williams & Bradbury for Kane.
Mr. Lynn A. Williams for Milton.

This interference involves an application of Edmund Joseph Kane, filed January 14, 1915, as a division of an earlier case, No. 541,428, filed February 2, 1910, and the patent of John Lewis Milton, No. 1,096,048, dated May 12, 1914, granted on an application filed October 28, 1910.

On motion, the burden of proof was shifted to Kane on the ground that Milton might avail himself, under section 4887, R. S., of his British filing dated of October 28, 1909.

On April 18, 1916, times for taking testimony and for final hearing were set. No testimony was taken by either party, and on September 6, 1916, judgment on the record was entered for the senior party Milton. On September 28, 1916, counsel 39013—142

(Endorsed) Nov 7 1918

for the parties Milton and Kane stipulated that the judgment of priority rendered in favor of Milton be vacated, and that times be set for taking testimony. This stipulation was approved and times set for the taking of testimony.

The invention relates to a magneto generator for an internal combustion engine.

The Counts are as follows:

1. In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swing contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

2. In a device of the class described, a suitable field magnet, an indicator adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light

39013—143

(Endorsed) Nov 7 1918

743

3. spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with the yoke,

and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

4. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

5. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the en-

ging, and an impact member fixed relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

39013—144

(Endorsed) Nov 7 1918

744

4.

6. In a device of the class described, a field magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the field magnet, a yoke mounted upon shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an ignition spark in the combustion chamber of the engine.

The invention is an improvement in magnetos. This old magneto had been mounted on a base at the side of the engine cylinder and was connected up with the igniter by means of a rod. By this arrangement proper adjustment between the magneto and the igniter was difficult to maintain. The improvement consisted in making the plug for the igniter and the bracket for the magneto in one integral piece, so that the plug and magneto could be removed and replaced together.

While Milton has been given the benefit of the British filing date, he has himself testified to work upon the invention prior to that date. But he is in no way corroborated and his own unsupported testimony cannot avail him. He is therefore limited for conception and constructive reduction to practice to his British filing date, October 28, 1909.

Kane's testimony is to the effect that he made drawings of the invention on April 11, 1909, which he showed to others on April 14, 1909. In this he is fully corroborated. The invention was reduced to practice within a few days thereafter.

Mr. Chiville, a draftsman, testified that he and Kane were

39013—145

(Endorsed) Nov 7 1918

745

5.

independently put to work in the spring of 1909, to improve the mounting or arrangement of the magneto. He says that Kane submitted the design shown in his applica-

tion a few days later. One of the structures was made immediately and demonstrated the practicability of the device. This entitled Kane to reduction to practice in the spring of 1909, long prior to any date that can be accorded Milton.

All of the witnesses were examined to a greater or less extent on the relations existing between Milton and Kane, apparently with a view to finding out whether Kane could have derived the invention from Milton. None of the witnesses give evidence which throws doubt on the question of Kane's independent inventorship. Milton claims to have made sketches and drawings some time before Kane's date of conception. He does not assert, however, that he ever disclosed the same to Kane. On the other hand, Kane positively denies any knowledge of Milton's alleged earlier work. Kane must therefore be regarded as an original and prior inventor.

Priority of invention of the subject-matter in issue is accordingly awarded to Edmund Joseph Kane, the junior party.

Limit of appeal: April 19, 1917.

H. E. STAUFFER
Examiner of Interferences.

March 30, 1917.
39013—146

(Endorsed) Nov 7 1918

746

2-224

Room No. 261.

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 45.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington, D. C.

JHD

March 30, 1917.

(Rubber stamp) U. S. Patent Office, Interference Division
Mar 30 1917 Mailed

In Re Interference No. 39013.

Kane

v.

Milton.

} Before the Examiner of
Interferences.

Please find below a communication from the Examiner in charge of Interferences in regard to the above-cited case.

Very respectfully,

6-1652

THOMAS EWING
Commissioner of Patents.

Enclosed please find copy of the decision rendered this day in the above noted case.

H. T. STAUFFER
Examiner of Interferences.

39013-147

(Endorsed) Nov 7 1918

484

Defendants' Exhibit No. 49.

747

2-603

Address Only
The Commissioner of Patents
Washington, D. C.

Letter No.

DEPARTMENT OF THE INTERIOR
United States Patent Office
Washington

May 17, 1917.

In the matter of the
Interference of
Milton

vs.

Kane,

Intf. No. 39,013.

Sirs:

You are hereby notified to withdraw the exhibits and extra copies of the printed record filed by you in the above entitled case, within ten days from the date hereof, or they will be otherwise disposed of.

Very respectfully,

Chief Clerk.
F.

John Lewis Milton,
c/o Lynn A. Williams,
Monadnock Block,
Chicago, Ill.

39013-148

(Endorsed) Nov 7 1918

748

39013—47.

Harrison { 3634
 { 3638

Williams
ord C. Bradbury
rt M. See
bert G. McCaleb
bert F. Bracke

Williams, Bradbury & See
Attorneys and Counselors
in
Patent and Trade Mark Causes
1315 Monadnock Block
Chicago

May 31, 1917.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

Please permit Mr. Norman T. Whitaker, of Legal Building, Washington, to withdraw from the file of interference No. 39,013, Milton vs. Kane, the exhibits and extra copies of the printed record filed by both parties.

Respectfully,

LYNN A. WILLIAMS
Attorney for Milton.
WILLIAMS & BRADBURY
Attorneys for Kane.

Received the above printed record and exhibits for both parties.

NORMAN T. WHITAKER
Per W. C. MILES

May 24, 1917

39013—149

(Endorsed) Nov 7 1918

IN THE UNITED STATES PATENT OFFICE.

Kane v. Milton.

Patent Interference No. 39,013.

Order.

Magneto Generator.

Application of Edmund Joseph Kane filed Jan. 14, 1915, No. 2,097, division of No. 541,428 filed Feb. 2, 1910.
Patent granted John Lewis Milton May 12, 1914, No. 1,096,048, on application filed Oct. 28, 1910. No. 589,564.

Messrs. Williams & Bradbury for Kane.
Mr. Lynn A. Williams for Milton.

Interference No. 39,013, Kane v. Milton having come to my attention in connection with interference No. 39,181, Podlesak v. Kane, the fact is developed that when the testimony was taken both the Kane application and the Milton patent were owned by the Western Electric Company and that company therefore had it within its power to control the evidence introduced. The decision against Milton is rested on the ground of lack of corroboration of his own testimony.

Under the circumstances the office should not have attempted to make a decision on the question of priority. The assignee should be required to elect as between the two inventors.

In view of the above, and acting under my supervisory authority, the judgment of the examiner of interferences dated March 30, 1917, in favor of Kane, is hereby vacated and set aside, and the interference is hereby dissolved.

THOMAS EWING
Commissioner.

July 19, 1917.
39013—150

(Endorsed) Nov 7 1918

750

2—603

Address Only
The Commissioner of Patents
Washington, D. C.

Letter No. 49.

DEPARTMENT OF THE INTERIOR
United States Patent Office
Washington

July 19, 1917.

In the matter of the
Interference of
Kane
v.
Milton
Intf. No. 39,013. }

Sir:

Please find enclosed herewith a copy of an order of the
Commissioner, dated July 19, 1917, in the above entitled case.
By direction of the Commissioner:

Very respectfully,

W. F. WOOLARD
Chief Clerk.

E. J. Kane,
c/o Williams & Bradbury
720 Monadnock Block
Chicago, Ill.

J.

John L. Milton
c/o Lynn A. Williams
Monadnock Block
Chicago, Ill.

39013—151

(Endorsed) Nov 7 1918

Filed Aug. 10/17
(Rubber stamp) Docket Clerk Aug. 15 1917 U. S. Patent
Office

UNITED STATES PATENT OFFICE

Kane
vs.
Milton } Interference No. 39,013.

Petition to the Commissioner of Patents to Vacate Order of
July 19, 1917.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

Now come Edmund Joseph Kane and Webster Electric Company, his assignee, by Williams & Bradbury, his and their attorneys, and petition the Commissioner of Patents to withdraw his order dated July 19, 1917, in the above entitled interference.

Your petitioners respectfully show that now and at the time of the decision and judgment of priority by the Examiner of Interferences, dated March 30, 1917, the Webster Electric Company is not and was not the assignee of John Lewis Milton, one of the parties to the above entitled interference.

Your petitioners show on the contrary that now and at the time of the said decision of the Examiner of Interferences, and at the time the testimony was taken on behalf of Kane and on behalf of Milton the whole right, title, and interest in and to the Milton patent involved in the above entitled interference is and was vested in Lynn A. Williams, Trustee.

39013—152

(Endorsed) Nov 7 1918

752 Your petitioners respectfully show that they do not own nor control the Milton patent aforesaid, and are not in a position to execute or file either a disclaimer in the matter of the said Milton patent nor a concession of priority by or for Milton and in favor of Kane.

Your petitioners respectfully show that in the taking of testimony in the above entitled interference a bona fide effort was made to ascertain all of the facts and to secure the testimony of all of the witnesses having any knowledge of the facts tending to corroborate both Kane and Milton in their claims of inventorship.

Your petitioners show that John Lewis Milton has and throughout the conduct of the above entitled interference has had a direct financial and pecuniary interest in his patent.

Your petitioners respectfully show that they do not have and have not had the power or authority to elect as between Kane and Milton which should have the patent covering the subject matter in interference.

Your petitioners respectfully show that when the testimony was taken in the above entitled interference neither the Webster Electric Company nor any other one party had it within its power to control the evidence introduced.

The assignment records of the Patent Office show and have shown throughout the conduct of the above entitled interference who the owners of the Kane application and the Milton patent have been, and the assignment records show that when the interference was declared the Kane application was owned by Edmund Joseph Kane himself and
39013—153 —2—

(Endorsed) Nov 7 1918

753 that it was assigned to the Webster Electric Company prior to the taking of testimony in the said interference. These assignment records show also that the Milton application theretofore owned by John Lewis Milton himself was assigned to Lynn A. Williams, Trustee, on April 10, 1912, and that the said assignment was recorded on December 13, 1915. Your petitioners show that no other assignments of the said Kane application or the said Milton patent have ever been executed or recorded and that the ownership of the said Kane application and the said Milton patent as it now exists is fully shown by the assignments of record in the Patent Office.

Under the facts and circumstances as above set forth, and as verified by the accompanying affidavit of Lynn A. Williams, it is respectfully requested that the Commissioner's Order of July 19, 1917, in the above entitled interference be vacated and withdrawn.

Respectfully,

EDMUND JOSEPH KANE, and

WEBSTER ELECTRIC COMPANY,

By WILLIAMS & BRADBURY,

His and Their Attorneys.

Chicago, Illinois,

August 13, 1917.

39013—154

—3—

(Endorsed) Nov 7 1918

754 (Rubber stamp) Docket Clerk Aug 15 1917 U. S. Patent Office

UNITED STATES PATENT OFFICE

Kane }
vs. } Interference No. 39,013.
 Milton }

AFFIDAVIT OF LYNN A. WILLIAMS

County of Cook, }
 State of Illinois. } ss.

LYNN A. WILLIAMS, being first duly sworn on oath deposes and says:

I am an attorney at law and a member of the firm of Williams, Bradbury & See, whose practice is confined to patent, trade-mark and copyright causes. Prior to the formation of the partnership of Williams, Bradbury & See, I was a member of the partnership of Williams & Bradbury, the attorneys of record for Kane in the above entitled interference. I personally am the attorney of record for John L. Milton, one of the parties to the above entitled interference.

My present firm and its predecessors, and I individually, or the firms of which I have been a member, have been the attorneys for the Webster Electric Company in patent matters for a period of some ten years. I personally am familiar with the affairs of the Webster Electric Company insofar as they relate to patent matters.

During a period of several years commencing in 1906, John L. Milton, one of the parties to the above entitled interference, invented certain improvements relating to electric generators and magneto ignition equipment, upon which inventions 39013—165

(Endorsed) Nov 7 1918

755 tions he applied for Letters Patent of the United States. Mr. Milton entered into various license contracts and agreements with the Webster Electric Company and its predecessor, the Webster Manufacturing Company, in accordance with which agreements the Webster Electric Company was licensed to make, use and sell Mr. Milton's said inventions, and in accordance with the said contracts the Webster Electric Company agreed to pay Milton certain royalties.

Certain disputes and controversies arose between the said John L. Milton and the said Webster Electric Company, and certain litigations were commenced. In April, 1912, all of these matters in controversy were amicably settled under an agreement under which the Webster Electric Company undertook to pay Milton the sum of Twenty-five Thousand (\$25,000.00) Dollars, partly in cash, partly in notes secured by a chattel mortgage upon certain machinery owned by the Webster Electric Company, and partly in a series of seventy-five (75) notes for Two Hundred Dollars (\$200.00) each, one note being payable each month, beginning on May 1, 1913, and continuing for a period of seventy-five months thereafter.

In according with this settlement agreement, which was entered into on April 10, 1912, Milton executed a blank assignment of his several patents and patent applications, including the one involved in the above entitled interference, and this assignment was deposited with me as escrow, to be held pending the payment of all of the said seventy-five notes, this assignment to be filled in with the name of the Webster Electric Company upon proof to me of the completion of the payment of all of said notes.

On the 11th of December, 1915, a further agreement was entered into between Webster Electric Company and John 39013—156

—2—

(Endorsed) Nov 7 1918

756 L. Milton, whereby I was authorized to fill into the blank assignment the name of Lynn A. Williams, Trustee, as assignee, and to record the said assignment, and thereafter to hold title to the said Milton patents and pending applications until such time as the Webster Electric Company might complete the payment of all of the said seventy-five notes, whereupon I was authorized to execute an assignment of said patents and applications in favor of the Webster Electric Company. This trust agreement provided, also, that in the event of the failure of the Webster Electric Company to complete the said payments, I should, upon notice, offer the said patents and applications for sale to the highest bidder, and should apply the proceeds in payment to Milton of the unpaid balance of Twenty-five thousand dollars.

Coincident with the execution of the said trust agreement, the aforesaid blank assignment was filled in with the name Lynn A. Williams, Trustee, and the said assignment was recorded in the United States Patent Office under date of December 13, 1915.

The Webster Electric Company has not as yet completed payment of all of the said notes to Milton, and I therefore continue to hold title to the said Milton patents and applications, including the Milton patent involved in the above entitled interference. Under the terms of the trust agreement, I am bound to continue to hold such title and do still hold it. The last of the aforesaid notes does not mature until July, 1919, and unless there is some advance payment of the unmatured notes, or unless there is some default in the payment of such notes as do mature, I shall continue to hold title to the Milton patent involved in the above entitled interference until some time in 1919.

39013—157

—3—

(Endorsed) Nov 7 1918

757 While, therefore, the Webster Electric Company is in the process of acquiring title to the Milton patent involved in the said interference, the Webster Electric Company has not as yet acquired such title. Meanwhile John L. Milton has a beneficial interest in the said patent. I certainly would be liable for breach of trust if, prior to the completion of the payment of said sum of Twenty-five Thousand Dollars I should execute an assignment of the Milton patent in favor of the Webster Electric Company or any other party.

Shortly after the above entitled interference was declared, I advised Mr. Milton of the fact, and spent parts of several days with him in going through his records and papers, in an effort to locate any and all documentary evidence which would aid Mr. Milton in fixing his date of invention, or which would serve as evidence in establishing his date of invention. This was prior to the execution of Milton's preliminary statement.

At the same time I ascertained from Mr. Milton the names and addresses of the witnesses upon whom he would rely to corroborate his testimony as to his date of invention.

Shortly afterward I interviewed all of the respective witnesses named by Mr. Milton. I found that some of them had little knowledge of the facts, and that the facts known to others of these witnesses indicated that Kane, rather than Milton, was the inventor of the subject matter in controversy. After I had thus satisfied myself that Kane was probably the prior inventor, I so advised Mr. Milton and the Webster Electric Company.

The Webster Electric Company thereupon entered

into negotiations with Kane, as a result of which the Web-
39013—158 —4—

(Endorsed) Nov 7 1918

758 ster Electric Company acquired the whole right, title and
interest in and to the Kane application involved in the
said interference.

In connection with these negotiations Kane showed to me
the documentary evidence upon which he relied to establish
his date of invention, and gave me the names and addresses
of the witnesses upon whom he would rely. These witnesses
were in large part the same witnesses upon whom Milton had
proposed to rely in establishing his date of invention.

Shortly thereafter I interviewed all of the additional wit-
nesses named by Kane, and reached the conclusion that Kane
could undoubtedly establish priority of invention as against
Milton.

Thereupon I interviewed Mr. Milton and presented to him
the facts upon which I based my conclusion that Kane could
establish priority of invention as against Milton. I suggested
to Milton that under the circumstances he execute a conces-
sion of priority in favor of Kane, but this he declined to do
for the reason that he still claimed to be the original and first
inventor, and he expressed his unwillingness to say or do any-
thing which could be taken as indicating or implying that he
did not regard himself as the original and first inventor. He
said, among other things, that he would not put himself in the
position of taking payment from the Webster Electric Com-
pany for his applications or patents, and at the same time
conceding that some other party was the inventor of the sub-
39013—159 —5—

(Endorsed) Nov 7 1918

759 ject matter which he had undertaken to sell to the Web-
ster Electric Company.

It was thereupon arranged between Milton and the Webster
Electric Company and Kane that both Kane and Milton should
give their testimony as to the making of the invention in issue,
and that all of the witnesses having knowledge of any of the
facts relating to the making of the invention either by Kane
or by Milton should be called upon to testify as to all of the
facts within their knowledge, and all parties were satisfied to
have me or the members or employees of my firm arrange for

the introduction of this testimony to the end that all of the testimony and evidence relating to the making of the invention by either party in interference should be put before the Patent Office in order that a decision upon the question of priority might be made by an impartial tribunal, and in a case in which the Webster Electric Company was interested on behalf of Kane and in which Milton was interested in his own behalf, subject only to the right of the Webster Electric Company ultimately to acquire the Milton patent, and in the event that it should complete the payment of Twenty-five Thousand Dollars, as above set forth.

There was not the slightest collusion between any of the parties, and there was no effort by any party to conceal any evidence or to modify any evidence which would in any way tend to prevent a correct determination as to which of the two parties was the prior inventor of the subject matter in had an opportunity to examine and to rebut any and all of the evidence thus taken.

39013—160

—6—

(Endorsed) Nov 7 1918

760 issue. All parties interested had the fullest opportunity to produce all of the available evidence, and all parties

When the testimony had been completed it was printed and filed in the usual manner. No brief was submitted on behalf of either party. The Examiner of Interferences was thus enabled to decide the question of priority upon the evidence without any advocacy of the contentions of either party as against the other.

The contest upon the question of priority was a genuine and bona fide contest in which neither the Webster Electric Company nor any other single interest controlled or sought to control the production of evidence or the nonproduction of evidence.

Throughout the interference and up to the present time John L. Milton had an interest in his patent, which was and still is adverse to the interest of the Webster Electric Company in the Kane application in interference.

39013—161

—7—

(Endorsed) Nov 7 1918

761 I am making this affidavit in support of the Petition of Kane and Webster Electric Company to vacate the order

of the Commissioner of Patents dated July 19, 1917 in the above entitled interference.

LYNN A. WILLIAMS

Subscribed and sworn to before me this 13th day of August, 1917.

MARY A. COOK

Notary Public.

39013—162

(Endorsed) Nov 7 1918

762 Recorded Vol. 123, Page 438.

39,013.

51

J. R. S.

IN THE UNITED STATES PATENT OFFICE.

Kane *vs.* Milton.

Patent Interference No. 39,013.

Petition.

Magneto Generator.

Application of Edmund Joseph Kane filed January 14, 1915, No. 2,097, division of application No. 541,428, filed Feb. 2, 1910.

Patent granted John Lewis Milton May 12, 1914, No. 1,096,048, on application filed October 28, 1910, No. 589,564.

Messrs. Williams & Bradbury for Kane.

Mr. Lynn A. Williams for Milton.

On July 19, 1917, the Commissioner entered an order directing that the judgment of the examiner of interferences, dated March 30, 1917, in favor of Kane, be vacated and set aside and the interference be dissolved. This order was based on the ground that it had developed when the testimony was taken that both the Kane application and the Milton application were owned by the Webster Electric Company; that that company had, therefore, the power to control the evidence; and that it should be required to elect as between the two inventors.

The present petition asks that the order be set aside on the

ground that it was entered under a misapprehension as to the facts. In the affidavit accompanying the petition the attorney who appears on the record as counsel for Milton 39013—163

(Endorsed) Nov 7 1918

763 and who is a member of the firm of attorneys representing Kane, states that he is the attorney for the Webster Electric Company, that the Milton patent was assigned to him as a trustee for a specific purpose, namely, to hold until certain promissory notes given by the Webster Electric Company to Milton in payment for certain patents and applications, including the application on which the patent involved in the interference was granted, had been paid, the last of these notes not becoming due until sometime in 1919, and should there be a default in the payment of these notes, after due notice to sell the patents and apply the proceeds to paying the unpaid balance to Milton. The assignment, which is to Lynn A. Williams, Trustee, does not state what the terms of the trust are, but the terms are set out in the affidavit and copies of the agreement referred to therein were submitted to me for inspection.

It is further stated in the affidavit that after the witnesses had been interviewed Milton was notified that in the opinion of the attorney Kane was the first inventor and that Milton declined to file a concession of priority but that he knew of all the proceedings and that there was no attempt to conceal any evidence which would have any bearing on the question of priority. It appearing, therefore, that the statement of the Commissioner, that both the application and the patent were owned by the same assignee, was made under a misapprehension and that neither the trustee nor the Webster Electric Company had the power to elect between the parties to the interference, the order will be vacated.

It was stated to me that the attorney had interviewed the Commissioner and was informed by him that upon the present 39013—164

—2—

(Endorsed) Nov 7 1918

764 tation of the facts in the form of an affidavit the order would be vacated. The petition was brought to Washington on August 15, 1915, by a representative of the attorney, who arrived, however, after the Commissioner, who had resigned, had left the city.

It is directed that the order of July 19, 1917, be vacated and the interference is restored to the condition that it was prior to the entry of that order.

R. F. WHITEHEAD
Acting Commissioner.

August 17, 1917.

39013—165

(Endorsed) Nov 7 1918

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52

Address Only
The Commissioner of Patents
Washington, D. C.

ESH

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington, D. C.

August 21st, 1917.

In the matter of the
Interference of
Kane vs. Milton
No. 39,013

} Petition by Kane.

Sir:—

Please find enclosed herewith a copy of a decision of the Acting Commissioner dated Aug. 17, 1917, in the above entitled case.

Very respectfully,

W. F. WOOLARD
Chief Clerk.
F.

Edmund Joseph Kane,
c-o Williams & Bradbury,
Monadnock Block,
Chicago, Ill.

John Lewis Milton,
c-o Lynn A. Williams
Monadnock Block,
Chicago, Ill.

39013—166

(Endorsed) Nov 7 1918

(2)
2—210.

Milton vs. Kane.

- | | | | |
|-----|----------------|---|----------------------------|
| | | | [Sheet] |
| 1. | Aug. 24, 1915. | Declaration. | Statements due Sept. 27/15 |
| 2. | Sept 13/15. | " of intf. to patentee returned by | |
| | | P. O. | |
| 3. | " 14 " | Address of Milton due | Sept. 29/15. |
| 4. | " 3 " | Stipulation to extend time for Stmt | |
| 5. | Sept. 17/15. | Statements due | Oct. 7/15. |
| 6. | Oct. 1, 1915. | Letter re address of Milton | |
| 7. | " 2/15 | Notice of declaration remailed to pat- | entee |
| 8. | " 6 " | Statement of Kane | |
| 9. | " 7 " | Letter to | " |
| 10. | " 7 " | Stipulation to extend time for State- | ments. |
| 11. | " 7/15 | Registry return receipt | |
| 12. | " 11 " | Statements due | Oct. 18/15 |
| 13. | " 18 " | Stipulation to extend time for Stmts | |
| 14. | " " " | Statements due | Nov 8/15 |
| 15. | Nov. 1/15 | Pet. by Kane to extend time for Stmts | |
| 16. | Nov. 3/15 | Pet by Kane granted. Statements due | Nov 29/15 |
| 17. | " 8 " | Statement of Milton | |
| 18. | " " " | Letter to | " |
| 19. | " 30 " | Stipulation to extend time for filing | statements |
| 20. | Dec. 2/15 | Receipt of stip acknowledged Call up | with 39,181. |
| 21. | Dec. 17 " | Testimony set. | F. Id. July 5/16 |
| 22. | Jan. 8-16 | Authority to inspect & obtain copies. | |
| 23. | Feb. 14/16 | Brief for Kane (2 Copies) | |
| 24. | " 15 " | Motion to Shift Proof by Milton | |
| 25. | " " " | Brief for Milton | |
| 26. | Feb'y 18/16 | Motion to shift proof granted. Testy | reset |
| 27. | Apr. 17/16 | Stipulation to Extend time for testy. | Filing Aug. 3/16. |
| 28. | " 18/16 | Times extended. | F. H. Sept. 5/16. |
| 29. | Sept. 6/16 | Decided favor Milton, L. A. Sept. 26/10 | |
| 30. | " 25 " | Stipulation to extend L. A. | |

39013—168

(Endorsed) Nov 7 1918

767

2—210.

Kane vs. Milton.

[Sheet]

- | | | | |
|-----|-------|-------|--|
| 31. | Sept. | 27/16 | L. A. from dec'n Sept 6/16 extended to Oct 2/16 |
| 32. | " | 28 " | Stipulation to vacate & set time for testy |
| 33. | " | 29 " | Judg't of Sept 6/16 vacated. Testy re-set F. H. Feb. 16/17. |
| 34. | Dec. | 20/16 | Testimony & Exhibit for Kane (in box) |
| 35. | " | " " | Letter to " |
| 36. | " | 26 " | Testimony & Exhibits for Kane (in box and Section 28) |
| 37. | " | 27 " | Letter to Kane |
| 38. | Jany | 4/19 | Printed record for Kane (31 copies) |
| 39. | " | " " | Letter to " |
| 40. | " | 11 " | Testimony & Exhibit for Milton (in box) |
| 41. | " | 12 " | Letter to " |
| 42. | " | 25 " | Printed record for Milton (31 copies) |
| 43. | " | 26 " | Letter to " |
| 44. | March | 30/17 | Decided favor of Kane. L. A. April 19/17 |
| 45. | " | " " | Letter of transmittal |
| 46. | Apr. | 27/17 | Decision noted (See letter) |
| 47. | May | 24/17 | Records & Exhibits for Milton and Kane returned to W. T. Whitaker. |
| 48. | July | 19 " | Commr's Order (decision of Mar. 30/17 vacated & intf. dissolved) |
| 49. | " | " " | Notice of Order |
| 50. | Aug. | 15 " | Petition by Kane that Order of July 19/17 be vacated |
| 51. | " | 17 " | Commr's decision granting petition |
| 52. | " | 17 " | Notice of decision. |
| 53. | | | |
| 54. | | | |
| 5. | | | |
| 6. | | | |
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| 9. | | | |
| 0. | | | |

(Written across face): Dissolution noted by Examiner of Interference Aug. 8, 17.

39013—167

(Endorsed) Nov 7 1918

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Defendants' Exhibit No. 54.

768

2—431

191

Attorneys.

Edmund Joseph Kane,

**(c/o Brown , Nissen & Sprinkle,
312 S. Dearborn St.,
Chicago, Ill.)*

c/o Williams & Bradbury
720 Monadnock Block
Chicago, Illinois

John Lewis Milton

c/o Lynn A. Williams,
Monadnock Block,
Chicago, Ill.

(Endorsed) Nov 7 1918 1282 11/18

770

DEFT'S EX. 54.

2—390.

UNITED STATES OF AMERICA,

DEPARTMENT OF THE INTERIOR,

United States Patent Office.

To all to whom these presents shall come, Greeting:

This Is To Certify that the annexed is a photographic copy from the Records of this Office of the File Wrapper and Contents, in the matter of the Letters Patent of Edmund Joseph Kane, Assignor to Webster Electric Company, Number 1,204,573, Granted November 14, 1916, for Improvement in Electric Igniters for Explosive-Engines.

In Testimony Whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 29th day of January, in the year of our Lord one thousand nine hundred and nineteen and of the Independence of the United States of America the one hundred and forty-third.

(Seal)

F W CLAY

Acting Commissioner of Patents.

**Matter in italics in parentheses, stricken out in original transcript.*

771

1910

Div. 28

(Ex'r's Book 137—16

Number (Series of 1900),

541,428

Patent No. 1204573

Name Edmund Joseph Kane.

Assor. to Webster Electric Company, of Racine, Wis.,
a corp of West Virginia

of Chicago.

County of

State of Illinois.

Invention Electric Igniters for Explosive Engines.

Parts of Application Filed.

Original

Renewed

| | | |
|-----------------------|------------------|-------|
| Petition | February 2, 1910 | , 191 |
| Affidavit | " " 1910 | , 191 |
| Specification | " " 1910 | , 191 |
| Drawing 2 sheets | " " 1910 | , 191 |
| Model or Specimen | , 191 | , 191 |
| First Fee 1 Cash \$15 | Feb 2, 1910 | , 191 |
| " " Cert | , 191 | , 191 |
| Appl. filed complete | Feb 2, 1910 | , 191 |

Examined A R Benson

Oct 31 16

Allowed

For Commissioner.

For Commissioner

Notice of Allowance

Oct. 4, 1916

, 191

4 Final Fee Cash \$20

Oct. 16, 1916

, 191

✓ " " Cert

, 191

, 191

Patented

Nov 14 1916

Nissen & Sprinkle

Associate Attorney

Attorney * (*Brown, ^ and Hopkins.*

Williams & Bradbury # 1124 Monadnock Block)

1315 * (720) Monadnock Block Chicago, Ill.,

No. of Claims Allowed 5) Title as Allowed Electric Igniter* (s)

for 3 explosive engines

Class 123-152

6—1618

(In left-hand margin) Division of App., No. _____,
filed _____, 191_____

(Endorsed) Jan 29 1919

*Matter in italics in parentheses, stricken out in original transcript.

772 Frank T. Brown.
Francis A. Hopkins.

Law Offices of
Brown and Hopkins
Patent and Trade Mark Law a specialty.
1123 to 1126 Monadnock Building.
260 Dearborn Street.

Telephone
Harrison 292.
Cable Address
"Brohop."

(Rubber stamp) No. 15 Received Feb 2 1910 Chief Clerk
U. S. Patent Office

Chicago, Jan. 31, 1910.

Hon. Commissioner of Patents,
Washington, D. C.

CHS

Sir:

Enclosed find papers and drawings for application for patent in the name of Edmund Joseph Kane on Improvements in Electric Igniters for Explosive Engines, with our check for \$15. in payment of the first Government fee thereon.

Very respectfully,

BROWN & HOPKINS.

541428

1 Enclo.

(Endorsed) Jan 29 1919

773 573

3028

541,428

(Rubber stamp) Mail Room Feb 2 1910 U. S. Patent Office

PETITION

To the Commissioner of Patents:

The petition of Edmund Joseph Kane a citizen of the United States, residing at Chicago in the County of Cook State of Illinois and whose Post Office address is 123 N. Waller Ave. Chicago, Ill. prays that Letters Patent may be granted to him for the improvement in Electric Igniters for Explosive Engines as set forth in the annexed specification.

And he hereby appoints the firm of Brown & Hopkins, (composed of Frank T. Brown and Francis A. Hopkins, of 1124 Monadnock Block, 260 Dearborn Street, Chicago, State of Illinois, his attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign the drawings, to receive the Pat-

ent, and to transact all business in the Patent Office connected therewith.

Signed at Chicago in the County of Cook and State of Illinois this 22nd day of January 1910.

541428

2

(1) Inventor's signature EDMUND JOSEPH KANE

Inventor must sign papers in three places.

(In left-hand margin) 2:2:10

(Endorsed) Jan 29 1919

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3029

SPECIFICATION

To All Whom It May Concern:

Be it known that I, Edmund Joseph Kane, a citizen of the United States, residing at Chicago, in the County of Cook, and State of Illinois, have invented certain new and useful improvements in Electric Igniters for Explosive Engines, of which the following is a full, clear, and exact specification.

The invention relates to improvements in electric-igniters for explosive engines.

The object of the invention is to provide an electric ignit^e*(o)r mechanism with nov[^]ed and improved means for producing the spark for firing the charge.

A further object of the invention is to provide in a device of the character described improved means by which when the exhaust valve is held open during the operation of the engine by the speed governor mechanism and no charge in the cylinder is to be exploded, the igniter mechanism is rendered inoperative and consequently [^] the oscillating or rotating armature or inductor remains idle and a spark is not produced and as a consequence the resulting wear upon the moving parts

*Matter in Italics in parentheses, stricken out in original transcript.

and the loss of energy required to generate a use-
less spark is avoided.

A further object of the invention is to provide in
a device of the character described, direct and pos-
itively operating means for imparting movement to
, which preferably comprises the movable part of
the generator

“ “ the oscillating armature or inductor_Λ.

To the attainment of these ends and the accom-
plishment of certain other new and useful objects,
as hereinafter described, shown in the accompany-
ing drawings forming a part of the specification,
and finally pointed out more specifically in the ap-
pended claims, the invention is directed.

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In the said drawings, (Fig.) 1 is a side eleva-
tion of an explosive engine with the invention at-
tached and having parts of the igniter mechanism
shown in section and other parts shown in broken
lines in order to more fully disclose the details of
construction of the igniter mechanism and one man-
ner of attaching the invention to an explosive en-
gine.

✓ Fig. 2 is a detail plan view of the igniter mech-
anism with the walls of the cylinder of the explo-
sive engine to which it is attached in section.

✓ Fig. 3 is an enlarged detail view of the igniter
parts similar to the view in Fig. 1, but showing in
dotted lines the relative movements of the exhaust
valve operating rod, and the igniter operating
or generator

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means by which the igniter mechanism _Λ is ren-
dered inoperative and a spark not produced when
no charge is to be exploded in the cylinder because
through

“ “

of the action of the speed governor _Λ *(on) the ex-
on the generator

“ “

haust valve operating means_Λ. This view is taken
on line 3-3 of Fig. 2.

*Matter in italics in parentheses, stricken out in original transcript.

Similar characters of reference indicate similar parts throughout the several views. ¶ 1 is the engine cylinder, and 2 the main frame. ¶ 3 is the engine base. ¶ 4 is the fly-wheel on shaft 5 provided with a crank 6 operated by connecting rod 7 pivoted to the piston on the interior of the cylinder 1 in the usual or any desired manner. ¶ The engine cylinder 1 is provided with the usual side opening adapted to receive the usual igniter block 8 which is provided with an inner extension 9 fitted through the opening and extending into the cylinder 1. / In the horizontal opening through the block 8 extends a stationary electrode 10 which is preferably insulated from the igniter block 8 by suitable insulating material in the usual manner

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herein

and not / specifically shown, since it is the common

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(Endorsed) Jan 29 1919

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practice to insulate the stationary electrode from the igniter block rather than the movable electrode. Outside the block 8 on the electrode 10 is provided means for the securement to the electrode 10 of the wire 11, such means preferably comprising a threaded outer end on the electrode 10 and the two threaded chamfered or polygonal nuts 12 and 13, between which one end of the wire 11 may be secured. ¶ Secured to the igniter block 8 and preferably cast integral therewith is an arm 14 extending for a short distance approximately parallel with the outer wall of the cylinder 1 and provided at its forward extremity with the angular bearing portion 15 into which the shaft 16, on which is carried the armature or inductor, is journaled. X The armature or inductor may be of any desired type as well as the construction of the field of the igniter but the preferred form is an armature or inductor of the form shown only in dotted lines as indicated by the reference character 17 in Fig. 1 of the drawings, which, although not specifically shown may

56

consist of masses of laminated iron suitably joined together and of approximately the form shown in dotted lines in Fig. 1 and being mounted to oscillate with shaft 16, will, in a well known manner, produce rapid periodic reversals in the magnetic polarity of the cores 18 and 19 indicated in broken lines on Fig. 1 and will in a well known manner set up alternate currents in the coils surrounding them. The wound cores 18, 19 may consist of projections from the laminated iron plates indicated at 20, 21, which at their upper and lower extremities are joined by the magnet plates 22, 23.

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(Endorsed) Jan 29 1919

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equally be applied to magnetos or generators for furnishing electrical ignition whether the armature or moving part is of the wound type instead of the laminated metal or whether the field be of the ordinary form of winding.

The laminated cores 18, 19, may be wound in the manner common to this type, | one end of the winding indicated by 24 being connected to the supporting block 25 in contact with sleeve 15 and secured thereto by set screw 25^a, which completes the circuit to the bearing block 8 and the movable electrode 26^a(,) which is also journaled in bearing block 8 and extends to the outside of the block, being provided at its outer extremity with the crank arm 27 and held normally in such position that the

*Matter in italics in parentheses, stricken out in original transcript.

electrodes 10 and 26 are normally in contact with each other by means of the torsion spring 28, one end of which is secured to the igniter block 8 and the other end in engagement with the crank arm 27. The wire 11 already referred to as in contact with electrode 10 leads directly to the wound core 19, thus completing the electrical circuit. To the supporting block 25 is secured the laminated field members 20, 21, which carry the wound cores 18, 19. The end of the crank arm 27 on the movable electrode 26 is provided with an adjustable screw 29 provided with a lock nut and having a head at its lower extremity for engagement with the oscillating member 30, which is secured to rotate with the oscillating shaft 16 carrying the armature or inductor 17. The oscillating member 30 secured to the armature shaft 16 is provided with horizontally extending arms, the extremities of which are in engagement each with one end of coil springs 31, 32, which have their outer extremities secured to brackets 33, 34, extending laterally from the laminated field members 20, 21. The springs 31, 32 normally exert a tension on the oscillating member 30, thus holding the armature or inductor 17 in its normal position and offering elastic resistance to the rotation of the inductor or armature, which in

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order to rotate or oscillate must move with the oscillating member 30 through the medium of the armature shaft 16, to which both are secured. The oscillating member 30 is provided with a vertically extending projection or finger as indicated at 35 adapted for engagement by the reciprocating member 36 for the purpose of oscillating the armature or inductor 17 against the tension of springs 31, 32. The extension 15 carried on the igniter block 8 through the connecting portion 14 is provided with an extending branch as indicated at 37, the outer extremity of which carries a grooved roller or sheave 38, which serves as an anti-friction bearing

and support for the reciprocating member 36, the free end of which adjacent the grooved roller or sheave 38 is adapted normally to engage the finger 35 to oscillate the armature or inductor. Reciprocating movement is imparted to the member 36 preferably from the crank shaft 5 of the engine, and a convenient way of accomplishing this purpose is to secure / a gear as indicated at 40, which

is meshing with the gear 41, / of suitable size to impart the desired speed to the igniter whatever the character of the engine. ¶ In the present embodiment of the invention, as shown particularly in Fig. 1, the engine is of the single cylinder four-cycle type, the gears 40 and 41 being of proper proportions to impart the desired speed to the shaft 42 and gear 41 for operating the exhaust valve rod, as indicated at 43, which is accomplished by the eccentric

67 tion of the / cam 44 keyed on shaft 42 and bearing against the anti-friction roller 45 carried at the upper extremity of the pivotal support 46 of the exhaust valve operating rod 43. The igniter operating member 36 may be operated from the shaft cam 42, which also carries the eccentric / 44 in any desired manner, a convenient form being indicated in the drawings in Fig. 1 consisting of an eccentric secured to shaft 42 and carrying a strap 47 secured to the forward extremity of the igniter operating member 36.

541428 It is well known in this art that means such as just described may be used for operating the ex-

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(Endorsed) Jan 29 1919

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haust valve operating rod and it is equally well known in explosive engines that centrifugal governors may be employed on moving parts of the engine in order to control the speed of the engine by preventing the closing of the exhaust valve

when the engine reaches or exceeds the given speed. In explosive engines of the type herein shown, the piston is employed as a pump for drawing the explosive material into the cylinder but when the exhaust valve of the engine is held open automatically the action of the piston within the cylinder in creating a vacuum will be to cause the air to rush into the cylinder when the exhaust valve is open, following the lines of least resistance, so that a charge will not be drawn into the cylinder when the exhaust valve is open and consequently there will be no explosion take place in the cylinder. Heretofore it has been the practice in the use of igniters to connect them up positively with the engine so that the igniter runs constantly with the engine and a spark is produced at each cycle of operation of the engine whether a charge of explosive has been drawn into the cylinder or not. If, therefore, the engine has reached or exceeded a given speed and the explosion has been cut out by reason of the action of the governor due to the excessive speed, no explosion can take place until the speed has been reduced to or below the given degree and yet the igniter mechanism must continue to operate and the spark is wasted together with the energy necessary to create it and the igniter mechanism has been subjected to the wear incident to such operation for no useful purpose. It is to obviate this condition of useless wear on the igniter mechanism that is one of the special purposes of this invention, as stated, and it is not important what specific means for governing the speed of the engine be employed but the common form of reciprocating exhaust valve operating rod has been shown as commonly operated on four-cycle engines and this is further shown under the control of an ordinary centrifugal governor com-

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(Endorsed) Jan 29 1919

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prising pivoted weighted members 50, 51, secured to the fly-wheel 4 or the crank shaft 5 of the en-

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gine and normally held in a given position by suitable springs 52, 53, which may be adjustable in order to vary their tension in a well known manner not necessary to describe for the purposes of illustrating the present invention. These spring controlled pivoted members 50, 51, may be connected with a suitable member slidably mounted on crank shaft 5, which preferably has an exterior cone shape and against which bears one end of the latch 54 which is pivoted at 55 on the main frame of the engine and has one end, as indicated at 56, adapted to engage with a notched member 57 on the exhaust valve operating rod 43. The usual operation of this form of governor is that, with the springs 52, 53 adjusted to have a given tension when the speed of the crank 25 reaches or exceeds a given speed, the operation of the governor will cause the end 56 of the latch to be depressed so that it will engage the notched member 57 on the exhaust valve operating rod 43 and prevent the turn of this rod when released by cam 44 and in this manner hold open the exhaust valve preventing further explosions of the engine because preventing the drawing in of a charge until the speed of the crank shaft falls below the given speed when the spring controlled members 50, 51 on the governor will act to release the exhaust valve operating rod and permit the exhaust valve to close, which will then cause the action of the piston to draw in a charge of explosive for the use of the engine.

It is obvious that even though the reciprocating member 36 which is shown as constantly operating from the crank shaft of the engine shall operate the igniter mechanism, the spark produced will be wasted if the exhaust valve is not closed so that a charge of explosive is provided within the cylinder. It is found by experience that it is very desirable to avoid all the wear and tear possible on the igniter mechanism. In order therefore that

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(Endorsed) Jan 29 1919

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the igniter mechanism may be rendered inoperative and consequently no spark produced when there is no charge in the cylinder to be exploded by reason of the exhaust valve being automatically kept open due to the engine having passed a given speed and because of the governor control over the exhaust valve, I provide means for automatically stopping the operation of the igniter mechanism under the control of the exhaust valve operating means. In the present embodiment of the invention the exhaust valve being under the control of the exhaust valve operating rod 43 I secure to the rod 43, in any suitable manner, a support 60 carrying at its upper extremity a suitable anti-friction roller 61. In order that the igniter operating member 36 may be properly timed to release the spring controlled igniter mechanism, the rod 36 is provided with a wedge block 62 adjustably secured thereto by set screw 63. By this means the timing of the igniter mechanism is secured. Another wedge block similar to the block 62 but having its inclined face in the opposite direction is also adjustably secured on the igniter operating member 36, as indicated at 64, and this member is adjustably secured to the member 36 by set screw 65. The operation of the exhaust valve cut out in its relation to the igniter mechanism is best seen from an inspection of the parts depicting the exhaust valve operating rod 43 and the igniter operating member 36 at the extremes of their movements as indicated by the full and dotted lines representing as shown in Fig. 3.

those parts./

The operation of the mechanism or as much thereof as pertains to the features of novelty herein described and claimed is as follows: The operator, desiring to start the engine, may turn the same in the usual manner, thus drawing in the charge of explosive into the cylinder. The operation of starting the engine will also impart movement to the igniter Δ operating member 36 through

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the gears 40 and 41, the shaft 42 and the eccentric secured thereto which operates the member 36. The

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(Endorsed) Jan 29 1919

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movement of the member 36 causes its extremity adjacent the igniter mechanism to engage the upwardly extending arm 35 near its upper extremity and thus rotate the member 30, the shaft 16 and of the generator

pr A the armature or inductor [^] carried thereon against the tension of springs 31, 32. This rotation or oscillation of the generator

pr A /, cillation of the inductor or armature [^] will cause a current to be generated which will pass through the electrodes 10 and 26 in the circuit already described. The adjustable wedge block 62 under control of set screw 63 on the igniter operating member 36 may be adjusted so that the forward end of the member 36 will become disengaged from the arm 35 on the oscillating member 30 at the time the current passing through the electrodes 10 and 26 is near its maximum strength. The sudden release of the oscillating member 30 being under the control of the springs 31, 32 will cause it to be returned to normal position, as shown in all of the figures, under considerable momentum which will of the generator

“ “ carry the inductor or armature [^], the shaft 16 and the oscillating member 30 beyond the normal position and will cause the extremity of the oscillating member 30 adjacent the crank arm 27 to strike the adjustable screw-threaded member 29. This will rotate the crank arm 27 against the action of spring 28 and will at the same time separate the movable electrode 26 from the stationary electrode 10. The current being at about its maximum strength, as stated, a spark will then pass between the electrodes 10 and 26.

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The engine having reached or passed a given speed by reason of which the governor mechanism has locked the exhaust valve operating rod 43

against closing the exhaust valve, the support 60 on the exhaust valve operating rod 43 will be carried to the position indicated in dotted lines in Fig. 3 by which the anti-friction roller 61 carried thereby will pass under the adjustable wedge block 64 and operate the igniter operating member 36 to the position indicated in dotted lines also in Fig. 3. In this position it will be seen that although the

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(Endorsed) Jan 29 1919

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igniter operating member 36 continues to operate it will be held in a position where its operation will or generator

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not affect the igniter mechanism \wedge which will remain inactive until the exhaust valve operating rod 43 is returned to normal.

By means of the mechanism as described, it will or generator

“ “

be seen that the igniter mechanism \wedge including the spring controlled oscillating member 30, the armature shaft 16 together with the armature 17 and the movable electrode will all be cut out and remain inactive at all times when the engine is running above normal speed and it is not desired to ignite a charge in the cylinder.

✓ It will also be seen that the arrangement of the parts as described for operating the oscillating or generator

“ “

ing form of igniter \wedge herein shown is exceedingly simple and direct and that by directly operating the oscillating means controlling the armature or inductor through the medium of the reciprocating member 36 I provide an exceedingly simple and durable mechanism that is certain in its operation and not liable to get out of order, and furthermore the movable parts of the igniter being rendered inactive at all times when the exhaust valve is open, there is no useless current generated in the igniter as is the case with the igniters positively operated from the crank shaft of the engine without means for cutting out the operation of the ig-

niter mechanism under the control of the exhaust valve operating means or the speed governor.

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(Endorsed) Jan 29 1919

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In order that the invention might be fully understood the details of the preferred embodiment thereof have been thus specifically described but it is not desired to be limited to the exact details of construction thereof, for it will be apparent that many modifications may be made by those skilled in the art without departing from the purpose and spirit of the invention, and what I claim is—

(Written across face) (5 Cls)

sub. D¹*(C¹) G¹

**(1. In an explosive engine, the combination with an electric circuit having included therein two electrodes, of means for holding the electrodes in*

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a generator comprising contact with each other, a magnetic field \wedge an inductor or armature located in said field and included in said circuit, means for moving the armature or inductor in relation to the magnetic field, exhaust valve operating means under the control of the explosive engine, and means under the control of the exhaust valve operating means for rendering the inductor or armature inoperative.

2. In igniter mechanism for explosive engines, the combination with an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each a generator comprising

“ “

other, \wedge a magnetic field, an oscillatory armature located in said field and included in said circuit, reciprocating means controlled by the running of the engine adapted to engage the oscillatory armature, an exhaust valve cut-out under the control of the engine, and means operated by the exhaust valve

“ “

generator control for rendering the \wedge oscillatory armature inoperative.

*Matter in italics in parentheses, stricken out in original transcript.

3. In igniters for explosive engines, the combination with an electric circuit / included therein two electrodes, of means for normally holding the electrodes in contact with each other, ^{having} a generator comprising a magnetic field, an oscillatory armature located in said field and included in said circuit, means controlled by the running of the engine for operating the said oscillatory armature inoperative. (In left-hand margin) 2:2:10

(Endorsed) Jan 29 1919

latory armature, and means controlled by the exhaust operating means for rendering the said oscillatory armature inoperative.

4. The combination in an explosive engine being provided with an exhaust valve controlled by the running of the engine, of igniter mechanism and means operated by the exhaust valve controlling means for rendering the igniter mechanism inoperative.

5. In an explosive engine, the combination with igniter mechanism, of means for operating the igniter mechanism by the running of the engine, an exhaust valve, means for operating the exhaust valve by the running of the engine, and means operated by the exhaust valve operating means for rendering the igniter operating means inoperative.

6. In explosive engines, the combination with electric igniter mechanism, of means for operating the igniter mechanism controlled by the running of the engine, an exhaust valve, means for operating the exhaust valve, means controlled by the running of the engine for operating the exhaust valve to cut out the explosions of the engine, and means operated by the exhaust valve controlling means for rendering the igniter mechanism inoperative.

an
47. In explosive engines, the combination with an

*Matter in Italics in parentheses, stricken out in original transcript.

generator
 “ “ igniter mechanism, of means controlled by the run-
 generator
 “ “ ning of the engine for operating the igniter mech-
 anism, an exhaust valve, means operated by the
 per C running of the engine for opening the exhaust
 valve, means for preventing the closing of the ex-
 haust valve when the engine reaches or passes be-
 yond a given speed, and means operated by the ex-
 haust valve controlling means for rendering the
 generator
 “ “ igniter operating means inoperative.
 5 8. In igniters for explosive engines, the com-
 bination with an electric circuit having included
 therein two electrodes, of means for normally hold-
 ing the electrodes in contact with each other, a mag-
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(Endorsed) Jan 29 1919

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netic field, an oscillatory armature located in said field and included in said circuit, a reciprocating member controlled by the running of the engine for moving the oscillatory armature in one direction, means for moving the oscillatory armature in the opposite direction, means for separating the electrodes when the oscillatory armature is moved in said opposite direction, and means for timing the movement of said armature in said opposite direction.

6 9. In igniters for explosive engines, the combination with an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a shaft carrying the said oscillatory armature, an oscillatory member secured to said shaft, a reciprocating member controlled by the running of the engine for moving the said oscillatory member in one direction, means for moving the oscillatory member in the opposite direction, means for separating the

*Matter in italics in parentheses, stricken out in original transcript.

electrodes when the oscillatory member is moved in said opposite direction, and means for timing the movement of said oscillatory member in said opposite direction.

7 10. *In igniters for explosive engines, the combination with an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a shaft carrying said oscillatory armature, an oscillatory member secured to said shaft, a reciprocating member controlled by the running of the engine for moving said oscillatory member in one direction, and means for moving the said oscillatory member and the armature in the opposite direction, said means comprising, an elastic spring, and means for timing the movement of said oscillatory member and said armature in said opposite direction.*

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(Endorsed) Jan 29 1919

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8 11. *In igniters for explosive engines, the combination with an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a shaft carrying said oscillatory armature, an oscillating member secured to said shaft, means controlled by the running of the engine for moving the said oscillatory member in one direction, said means comprising a reciprocating member adapted to engage said oscillatory member, and means for disengaging said reciprocating member from said oscillatory member.*

9 12. *In igniters for explosive engines, the combination with an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a shaft carrying*

*Matter in italics in parentheses, stricken out in original transcript.

said oscillatory armature, an oscillating member secured to said shaft, means controlled by the running of the engine for moving the said oscillatory member in one direction, said means comprising a reciprocating member adapted to engage said oscillatory member, and adjustable means for disengaging said reciprocating member from said oscillatory member.

10 15. In igniters for explosive engines, the combination with an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a shaft carrying said armature, an oscillatory member secured to said shaft, a reciprocating member controlled by the running of the engine for moving the said oscillatory member and the armature in the opposite direction, means for separating the electrodes when the armature and the oscillatory member are moved

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(Endorsed) Jan 29 1910

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in said opposite direction, and means for timing the movement of said oscillatory member and said armature in said opposite direction.

per A

14. The combination in an explosive engine, of an electric igniter, of means for operating the said igniter by the running of the engine, means controlled by the running of the engine for opening the exhaust valve of the engine, and means controlled by the exhaust valve operating means for rendering the igniter operating means inoperative.

per C

11 15. The combination in an explosion engine of an electric igniter comprising an oscillating armature or inductor within a magnetic field, means for oscillating the armature or inductor comprising a reciprocating member and elastic means for returning the armature or inductor to normal after being disengaged from said reciprocating member, carried by the reciprocating member

*Matter in italics in parentheses, stricken out in original transcript.

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and adjustable means ^Λ for disengaging the reciprocating member from the armature or inductor.

12 16. The combination in an explosive engine of an electric igniter comprising an oscillating armature or inductor within a magnetic field, means for oscillating the armature or inductor comprising a reciprocating member and elastic means for returning the armature or inductor to normal after being disengaged from said reciprocating member, adjustable means for disengaging the reciprocating member from the armature or inductor, exhaust valve operating means and adjustable means under the control of the exhaust valve operating means for rendering the said means for oscillating the armature or inductor inoperative.

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17. The combination in an explosive engine, of an electric igniter, means for operating the igniter, means for governing the speed of the engine, and means controlled by the speed governing means for rendering the igniter operating means inopera-

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(Endorsed) Jan 29 1919

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tive.

18. The combination in an explosive engine, of an igniter, exhaust valve operating means controlled by the running of the engine and means under the control of the exhaust valve operating means for rendering the igniter inoperative.

19. The combination in an explosive engine, of an igniter, a speed governor, and means under the control of the speed governor for rendering the igniter inoperative.

per C

13 20/ The combination in an explosive engine, generator

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of an igniter, means for operating the igniter ^Λ by the running of the engine, a speed governor operated by the running of the engine, and means under

*Matter in italics in parentheses, stricken out in original transcript.

the control of the speed governor for rendering the generator

“ “ *igniter \wedge inoperative.*

21. *The combination in an explosive engine, of an igniter, exhaust valve operating means, and means under the control of the exhaust valve operating means for rendering the igniter inoperative.*

per A 22. *The combination in an explosive engine, of an igniter, an exhaust valve, means for operating the exhaust valve by the running of the engine, a speed governor, and means under the control of the speed governor for simultaneously opening the exhaust valve and rendering the igniter inoperative.*

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18 14 25. *The combination in an explosive engine generator*

pr A *of an electric igniter \wedge , means controlled by the running of the engine for operating the igniter \wedge an exhaust valve, means controlled by the running of the engine for operating the exhaust valve, a speed governor, and means under the control of the speed governor for simultaneously opening the exhaust generator*

“ “ *valve and rendering the igniter \wedge inoperative.*

per C “ “ *valve and rendering the igniter \wedge inoperative.*

“(Insert A¹)

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per A 24. *The combination in an explosive engine, of an electric igniter, means controlled by the running of the engine for operating the igniter, an exhaust valve, means controlled by the running of the engine for operating the exhaust valve, a speed governor, and means under the control of the speed governor for simultaneously opening the exhaust valve and rendering the igniter operating means inoperative.)*

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In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 22nd day of January, A. D. 1910.

EDMUND JOSEPH KANE

Witnesses:

A. L. SPRINKLE,
M. W. CANTWELL.

OATH.

State of Illinois {
County of Cook { ss.

EDMUND JOSEPH KANE the above named petitioner being duly sworn (affirmed), deposes and says that he is a citizen of the United States and resident of Chicago in the County of Cook and State of Illinois that he verily believes himself to be the original, first, and sole inventor of the improvement in Electric Igniters for Explosive Engines described and claimed in the foregoing specification; that he does not know and does not believe that the same was ever known or used before his invention or discovery thereof, or patented or described in any printed publication in any country before his invention or discovery thereof, or more than two years prior to this application, or in public use or on sale in the United States for more than two years prior to this application; that said invention has not been patented in any country foreign to the United States on an application filed by him or his legal representatives or assigns more than twelve months prior to this application; and that no application for patent on said improvement has been filed by him or his representatives or assigns in any country foreign to the United States.

(3) Inventor's signature EDMUND JOSEPH KANE

Sworn to and subscribed before me this 22nd day of January A. D. * (190) 1910.

M. W. CANTWELL
Notary Public.

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*Matter in italics in parentheses, stricken out in original transcript.

Div. 28 Room 63

Paper No. 2

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Address only The Commis-
sioner of Patents, Wash-
ington, D. C.

All communications respecting
this application should give
the serial number, date of fil-
ing, and title of invention.

RYH

DEPARTMENT OF THE INTERIOR,
United States Patent Office.

Washington, D. C., March 26, 1910.

(Rubber stamp) U. S. Patent Office Mar 26 1910 Mailed
Edward Joseph Kane,
c/o Brown & Hopkins,
#1124 Monadnock Block, Chicago, Ill.

Please find below a communication from the Examiner in
charge of your application, S. No. 541,428, filed Feb. 2, 1910,
Electric Igniters for Explosive Engines.

E. B. MOORE,
Commissioner of Patents.

This case has been examined.

The particular type of oscillating magneto employed with
this engine is not sufficiently illustrated. Since the magneto
structure is made subject-matter for the claims, further illus-
tration is necessary.

The claims are all rejected as not requiring invention over
Bates, 946,816, Jan. 18, 1910 (123-152), in view of Weber,
820,535, May 15, 1906 (123-149).

No invention would be required to adapt the oscillating
magneto of Weber to the engine of Bates.

Applicant should also see

Longenecker, 862,568, Aug. 6, 1907 (123-150)

Packard, 780,221, Jan. 17, 1905 (123-149).

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21

MEW

A R BENSON
Asst Examiner.

(Endorsed) Jan 29 1919

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(Rubber stamps) U. S. Patent Office Mar 15 1911 Division XXVIII. Mail Room Mar 16 1911 U. S. Patent Office.

IN THE UNITED STATES PATENT OFFICE.

Div. 28, Room 63,
Edward Joseph Kane,
Electric Igniters for Explosive Engines.
Serial No. 541,428.
Filed February 2, 1910.

Hon. Commissioner of Patents,
A Washington, D. C.

Sir:

In the above-entitled matter and in response to the office action of March 26, 1910, please amend as follows:

Page 1, line 14 from the bottom, after "consequently" insert "the generator consisting of"

Same page, line 6 from the bottom, after "inductor" insert the
"which preferably comprises / movable part of the generator"

Page 2, line 13, after "mechanism" insert "or generator".
Line 16, change "on" to "through", and after "means" insert "on the generator".

Page 8, line 3 from the bottom, after "igniter" insert "or generator".

Page 9, lines 6 and 17, after "inductor or armature" insert "of the generator". Same page, line 4, after "armature or inductor" insert "of the generator".

Page 10, lines 2 and 6, after "mechanism" and after "igniter" line 13, insert "or generator".

√ √ √ √
In claim 1, line 4, after "field", and in claims 2 and 3, line 4 of each, after "other" insert: "a generator comprising".

√ √ √ √
In claim 2, line 9, and in claim 3, line 8, erase "oscillatory armature" and insert instead "generator".

Erase claims 4 to 6, inclusive.

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(Endorsed) Jan 29 1919

794 Claim 7, line 1, before "ignitor" insert "an". Lines 2 and 3, change "mechanism" to "generator" and in line 8 change "igniter operating means" to "generator".

Renumber claims 7 to 13 inclusive as 4 to 10 inclusive.

Erase claim 14.

Claim 15, line 6, after "means" insert "carried by the reciprocating member".

Renumber claims 15 and 16 as 11 and 12, respectively.

Erase claims 17 to 19, inclusive.

Claim 20, in lines 2 and 5 respectively, after "ignitor" insert "generator".

Renumber claim 20 as 13.

Erase claims 21 and 22.

Claim 23, in lines 2, 3 and 7, after "ignitor" insert "generator".

Renumber claim 23 as claim 14.

Erase claim 24.

Add the following claims:

per C

*(A)

*(15. *The combination in an explosive engine, of an electric ignitor comprising an oscillatory armature or inductor within a magnetic field, a constantly and positively operated exhaust valve operating cam shaft, means for oscillating the armature or inductor comprising a reciprocating member operated directly from the said exhaust valve operating cam shaft, means for causing said reciprocating member to engage and be disengaged from the armature or inductor, elastic means for returning the armature or inductor to normal after being disengaged from said reciprocating member, adjustable means for disengaging the reciprocating member from the armature or inductor, exhaust valve operating means comprising a reciprocating member operated from the said exhaust*

*Matter in italics in parentheses, stricken out in original transcript.

cam
valve operating / shaft, an adjustable wedge block
on the said reciprocating member for oscillating
the armature or inductor, and means on the said
exhaust valve operating rod for engaging said

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(Endorsed) Jan 29 1919

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wedge block for rendering the armature or induc-
tor inoperative under the control of the exhaust
valve operating rod.

16. The combination in an explosive engine, of
an electric igniter comprising an oscillatory arma-
ture or inductor within a magnetic field, a con-
stantly and positively operated exhaust valve op-
erating cam shaft, means for oscillating the arma-
ture or inductor comprising a reciprocating mem-
ber operated directly from the said exhaust valve
operating cam shaft, means for causing said os-
cillating means to engage and be disengaged from
the armature or inductor, elastic means for return-
ing the armature or inductor to normal after be-
ing disengaged from said reciprocating member,
adjustable means for disengaging the reciprocating
member from the armature or inductor, exhaust
valve operating means comprising a reciprocating
member operated from the said exhaust valve op-
erating cam shaft, an adjustable wedge block on
the said reciprocating member for oscillating the
armature or inductor, and means carried by the
exhaust valve operating rod comprising a branch
fixed thereto and carrying an anti-friction roller
for engaging the said wedge block to render the
igniter inoperative under the control of the exhaust
valve operating rod.)

per C
*(Insert
B¹)

>

Remarks.

This application, including the claims, has been thoroughly
revised in view of the references cited by the Examiner. It
is believed that the claims which are now in the case and
which have been revised and restricted are commensurate

*Matter in italics in parentheses, stricken out in original transcript.

with the scope of the invention in view of the prior art and should be allowed.

Referring first to the references relied upon by the Examiner, it should be noted that the claims as now restricted do not conflict with the Longenecker and Packard patents, both of which are apparently directed to mean for varying the time of the spark according to the speed of the engine, and are not adapted to entirely cut out the spark when the engine

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(Endorsed) Jan 29 1919

796 is up to speed, but simply varying the time of the spark for the purpose of regulating the speed of the engine.

The Packard construction also differs from that of applicant's in that it employs a constantly rotating generator and its regulation is directed solely to varying the instant of separating the electrodes, which in this manner governs the time of the spark, advancing or retarding the same.

In Applicant's device the advance and retardation of the spark is controlled by an adjustable wedge block 62 on the igniter operating member 36. The fixed support 60 carrying the anti-friction roller 61 and the cooperating adjustable wedge block 64 on the magneto operating rod 36, which cut in or out the magneto or generator without varying the time of the spark, are the particular devices aimed to be covered in applicant's claims, and it is submitted that they do not find their counterpart in the Packard construction.

The same is true of the Longnecker device, which is merely intended to advance or retard the spark under the control of the governor in a make-and-break ignition system operated from a battery. It is believed that all the claims now in the case therefore clearly distinguish from Longnecker, which should be withdrawn as a reference.

With respect to the construction embodied in the Bates and Webber patents, upon which the Examiner has relied in rejecting claims, it is true that as the Examiner has observed, applicant has applied his improvement to a magneto of the type shown in this Webber patent. But that is as far as the comparison goes, and applicant's claims now are drawn to distinguish over the construction of Webber, which is faulty because it is constantly operating, there being no means for stopping the operation of the magneto or generator when the

engine is up to speed, but in Webber although the time of the spark may be advanced or retarded while the engine is in motion, the spark is being constantly generated even when not needed and this delicate mechanism thus subjected to un-

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(Endorsed) Jan 29 1919

797 due and useless vibrations or oscillations which shorten the life of it. This is the feature that applicant has attempted to accomplish by his invention, and is one not found in any of the references. It is true that as the Examiner observes, the patent to Bates discloses igniter mechanism operated from a battery and means on the exhaust valve operating rod for breaking the circuit when the engine reaches a given speed or passes beyond same, but Bates has not shown ^{*}(in) his invention applied to a modern ignition system embodying a magneto or generator. Therefore, it is believed that the claims which now remain in the case are clearly allowable over the Bates patent as embodying useful and novel improvements and marking a distinct advance in this art. Applicant cannot agree with the Examiner that no invention would be required in perfecting the Webber device in view of Bates or other prior references which show Bates' idea as applied to a battery make-and-break ignition system. The best answer to the Examiner's argument is that Bates did not perfect his invention so that it could be applied to a magneto and did not even hint at such a thing. It remained for applicant to perfect the Webber type of oscillating magneto or generator by showing how it may be relieved of absolutely useless and unnecessary work and its life prolonged, a result which with respect to magneto or generator ignition neither Bates nor any of the prior patentees accomplished.

An allowance of the case in its present form is solicited.

Respectfully submitted,

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Chicago, Ills.,

March 11, 1911.

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(Endorsed) Jan 29 1919

BROWN & HOPKINS
Attorneys for Applicant.

798 (Rubber stamps) Mail Room Mar 16 1911 U. S. Patent
Office. U. S. Patent Office Mar 17 1911 Division XXVIII.

V

4

IN THE UNITED STATES PATENT OFFICE.

Div. 28, Room 63.

Edward Joseph Kane,
Electric Igniters for Explosive Engines,

Serial No. 541,428,

Filed February 2, 1910.

Hon. Commissioner of Patents,
B Washington, D. C.

Sir:

In the above entitled matter and supplementary to the
amendment dated March 11, 1911, responsive to office action
of March 26, 1910, please insert the following claims:

per C * (17. *In an explosive engine, the combination
with an electric circuit having included therein
fixed and movable electrodes, of means for holding
the electrodes normally in contact with each other,*
*(B¹) *a magnetic field, an inductor or armature movably
mounted in said field, means for operating the in-
ductor or armature by the running of the engine,
an arm on said movable electrode, and an arm se-
cured to and movable with the inductor or armature
and adapted to have direct engagement with the
said arm on the movable electrode to separate the
said electrodes.*

18. *In an explosive engine, the combination with
an electric circuit having included therein fixed and
movable electrodes, of means for holding the elec-
trodes normally in contact with each other, a mag-
netic field, an inductor or armature movably
mounted in said field, means for operating the in-
ductor or armature by the running of the engine,
an arm on said movable electrode, an arm secured
541428 (In left-hand margin) 3:16:11
27 (Endorsed) Jan 29 1919*

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*to and movable with the inductor or armature and
adapted to have operative engagement with the
said arm on the movable electrode, and an adjust-*

*Matter in italics in parentheses, stricken out in original transcript.

able head secured to said arm on the movable electrode for engagement with the movable arm on the inductor or armature.)

Remarks.

The above claims are specific to applicant's construction, and since they are believed to be directed to features of novelty over the art as cited, favorable consideration and allowance of same is asked.

Respectfully submitted,

BROWN & HOPKINS
Attorneys for Applicant.
B & H.

Chicago, Ill.,

March 13, 1911.

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(Endorsed) Jan 29 1919

*Matter in italics in parentheses, stricken out in original transcript.

Div. 28. Room 63

Paper No. 5

Address only "The Commissioner of Patents, Washington, D. C."

All communications respecting this application should give the serial number, date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR

HHM

United States Patent Office

Washington

May 4, 1911.

(Rubber stamp) U. S. Patent Office. May 4, 1911 Mailed.
Edmund Joseph Kane,
c/o Brown & Hopkins,

1124 Monadnock Block, Chicago, Ill.

Please find below a communication from the Examiner in charge of your application. S. No. 541,428, filed Feb. 2, 1910, Electric Igniters for Explosive Engines.

E. B. MOORE,
Commissioner of Patents.

Case considered in view of communications of Mar 15, and 16, 1911.

Claims 1 to 14, inclusive, are rejected as not requiring any invention over Bates, in view of Webber.

Claims 15 and 16 are rejected on the references *supra*, in view of the adjustable block on the igniter rod 16 in Longenecker, o*(r) record.

Claims 17 and 18 contain the precise elements and the precise arrangement thereof as disclosed in Bates and for this reason these claims are rejected.

Applicant appears to be of the opinion that it would be invention to render that type of oscillating armature igniter shown in Webber., inoperative at speeds above normal even if this idea has been applied to a make and break igniter having a battery as a source of current rather than an oscillating armature as shown in Bates. However, the office cannot

*Matter in italics in parentheses, stricken out in original transcript.

subscribe to this view and for this reason the claims have been rejected.

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Examiner.

(Endorsed) Jan 29 1919

801 (Rubber stamps) Mail Room Feb 17 1912 U. S. Patent Office U. S. Patent Office Feb 17 1912 Division XXVIII.

V
IN THE UNITED STATES PATENT OFFICE.

Div. 28, Room 63,
Edmund Joseph Kane,
Electric Igniters for Explosive Engines.
Filed Feb. 2nd, 1910.
Serial Number 541,428.

Hon. Commissioner of Patents,
C Washington, D. C.

Sir:—

In response to office letter of May 4th, 1911, please amend as follows:

Erase all of the claims and substitute therefor the following:

*(1) *In an explosive engine, the combination with engine mechanism of a magneto, means for operating the magneto by the running of the engine, a speed governor operated by the engine and means under the control of the speed governor for rendering the magneto inoperative when the engine passes a predetermined speed.*

sub. D¹

2. *The combination in an explosive engine having a speed governor and an exhaust valve operating rod of a magneto, means for operating the magneto by the running of the engine, governor mechanism operated by the engine for controlling the exhaust valve operating rod, and means under valve the control of the exhaust / operating rod for rendering the magneto operating means inoperative.*

*Matter in italics in parentheses, stricken out in original transcript.

Remarks.

Applicant has now carefully considered the prior art cited by the Examiner, and has erased the claims and substituted
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(Endorsed) Jan 29 1919

802 the two claims now in the case in the endeavor to simplify the issues.

Applicant's invention resides in the application of the magneto to the engine in connection with the means claimed for protecting the magneto by rendering it inoperative under governor control. This is an important invention, for the reasons brought out in the specification, and it is believed that the claims limited to their present form as they now appear, are allowable unless better references may be found.

Respectfully submitted,

BROWN & HOPKINS

Attorneys for Kane.

Chicago, Ill.,
February 14th, 1912.
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(Endorsed) Jan 29 1919

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Div 28 Room 63

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Paper No. 7

Address only "The Commissioner of Patents, Washington, D. C."

All communications respecting this application should give the serial number, date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR

RYH

United States Patent Office

Washington

March 29, 1912.

(Rubber stamp) U. S. Patent Office, Mar 29 1912 Mailed
Edmund Joseph Kane,

c/o Brown & Hopkins,
#1124 Monadnock Block, Chicago, Ill.

Please find below a communication from the Examiner in charge of your application. S. No. 541,428, filed Feb. 2, 1910, Electric Igniters for Explosive Engines.

E. B. MOORE,
Commissioner of Patents.

Case considered as amended Feb. 17, 1912.

Claim 1 is indefinite on account of "engine mechanism of a magneto."

As far as understood, the claims are rejected as not requiring any invention over Bates and Weber, of record. It is noted that the two claims now in this case are substantially the same in scope as claims 13 and 14, which were cancelled in response to the last office rejection.

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BENSON
Examiner.

(Endorsed) Jan 29 1919

IN THE UNITED STATES PATENT OFFICE.

(Rubber stamp) U. S. Patent Office, Feb 17 1913 Division XXVIII.

Div. 28, Room 63.

Edmund Joseph Kane,

Electric Igniters for Explosive Engines,

Filed Feb 2nd 1910,

Ser. No. 541,428.

The Commissioner of Patents,
D Washington, D. C.

Sir:—

In response to Office letter of March 29, 1912, please amend as follows:—

Substitute for the claims now in the case the following:—

- D¹ 7 1. In an explosive engine, the combination
with a magneto, of means for operating the mag-
neto by the running of the engine, a speed gover-
nor operated by the engine, and means under the
control of the speed governor for rendering the
magneto operating means inoperative when the en-
gine passes or exceeds a predetermined speed.
- 541428 2. The combination in an explosive engine hav-
33 ing a speed governor, and an exhaust valve oper-
ating rod operatively connected with the speed gov-
ernor, of a magneto, means for operating the mag-
neto by the running of the engine, and means
adapted to be operated by the movement of the ex-
haust valve operating rod for rendering the mag-
neto operating means inoperative.—

Insert.G¹>

(Cls 3-5)

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(Endorsed) Jan 29 1919

Remarks.

The claims have been rewritten merely for the sake of clearing up their phraseology to relieve them from the ob-
jections urged against their form by the Examiner, and to also render them more capable of being understood.

Unless the Examiner can find the entire combination of elements cited in these claims in a single structure organized and adapted to perform the functions of applicant's device it is believed that these claims should be allowed. So far as the art has been cited applicant appears to be the first to
in

provide means [^] a gas engine combination, by which a magneto is cut out or allowed to remain inoperative when the exhaust valve kept open under the control of the governor.

The Examiner's argument is apparently that there would be no invention in substituting in the Bates combination an igniting device of another character. Whether or not the substitution of the new element into the combination is of *(is)* the "happy thought" variety of invention, is immaterial because the results obtained by the new combination is different from the results of the Bates combination. Bates economizes on battery current while applicant lengthens the life of the physical parts of the magneto.

After the result has been obtained as the Supreme Court has said on numerous occasions, it may appear that an ordinary mechanic would have known how to arrive at the same result. But the best answer to this is as the Court also says, "it has not been done before".

Respectfully submitted,

Feb. 15, 1913.

BROWN & HOPKINS,
BROWN HOPKINS NISSEN & SPRINKLE
Attorneys for Kane.

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(Endorsed) Jan 29 1919

*Matter in italics in parentheses, stricken out in original transcript.

Div. 28 Room 63 436

Paper No. 9

Address only "The Commissioner of Patents, Washington, D. C." All communications respecting this application should give the serial number, date of filing, and title of invention.

DEPARTMENT OF THE INTERIOR

RYH

United States Patent Office

Washington

April 22, 1913.

(Rubber stamp) U. S. Patent Office, Apr 22 1913 Mailed.
Brown & Hopkins,
#1124 Monadnock Block, Chicago,
Ill.

Please find below a communication from the Examiner in charge of the application of Edmund Joseph Kane, S. No. 541,428, filed Feb. 2, 1910, Electric Igniters for Explosive Engines.

E. B. MOORE,

e6-2631

Commissioner of Patents.

Case considered as amended Feb. 15, 1913.

Page 1, line 10, "ignitor" should be igniter.

Applicant's remarks have been carefully considered, but the examiner is of the opinion that the new claims are anticipated by the references of record.

The claims are rejected on the patent to Bates, 946,816, of record, since it would not involve invention to substitute for the igniting device therein an igniter of the type claimed, in view of the patent to

Weber, 820,535, of record.

Further amendment in this case will be permitted only in the discretion of the examiner.

BENSON

Examiner.

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(Endorsed) Jan 29 1919

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(Rubber stamps) Mail Room Feb 19 1914 U. S. Patent
Office U. S. Patent Office, Feb 21 1914 Division XXVIII.

IN THE UNITED STATES PATENT OFFICE.

Division 28, Room 63

Application of Edmund Joseph Kane,
Improvement in Electric Igniters for Explosion Engines.
Filed February 2, 1910.
Serial Number 541,428.

To the Commissioner of Patents,
Washington, D. C.

Sir:—

The power of attorney heretofore given in the above-entitled application to Messrs. Brown & Hopkins, (a firm composed of Frank T. Brown and Francis A. Hopkins,), having been revoked by the the death of Francis A. Hopkins, of said firm, I hereby appoint Brown, Nissen & Sprinkle (a firm composed of Frank T. Brown, Charles M. Nissen and Arthur L. Sprinkle), with offices at 1124 Monadnock Block, Chicago, Illinois, as my true and lawful attorneys, with full power of substitution and revocation, to prosecute said application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith.

Signed at Chicago, in the County of Cook and State of Illinois, this 16 day of February, 1914.

EDMUND JOSEPH KANE.

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36

(Endorsed) Jan 29 1919.

(Rubber stamps) Mail Room Apr 18 1914 U. S. Patent Office U. S. Patent Office, Apr 20 1914 Division XXVIII.

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IN THE UNITED STATES PATENT OFFICE.

Div. 28, Room 63.
Edmund Joseph Kane.
Electric Igniter for Explosive Engines.
Filed February 2, 1910.
Serial No. 541,428.
The Commissioner of Patents,
Washington, D. C.

Sir:—

E In the above entitled matter and in response to office letter of April 22, 1913, please amend as follows:—

Page 1 line 10—change “ignitor” to “igniter”.

Remarks.

Applicant requests an action allowing the claims or finally rejecting them in order to put the application in condition for appeal, and in support of his contention that the claims are patentable over the references cited, would supplement the remarks contained in the Amendment of February 15, 1913, by calling the Examiner's attention to the Federal Court Case, *Smith vs. Macbeth*, 67 Fed. 137, in which the defendant contended that the features were found in two older machines and could have been combined without the exercise of inventive skill. The Court said in substance that it is true anybody could have done this if he had ascertained the cause of the defect in the Siemen's machine, the kind of motion, and the proper means of applying it, which would obviate the defect, and the Court added that the like and theories of a similar character, assumes what is not apparent; namely, that

541428
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(Endorsed) Jan 29 1919

809 the cause of the pre-existing defect, and its remedy were open to the discernment of the skilled mechanic.

Applying this to the present case, the Bates invention was directed to the economy of a battery current. Prior to Kane,

there was no attempt made to stop the operation of a magneto when the engine cut out. Therefore, Kane has done more than mere substitution of elements as the Examiner contends. He has discovered the desirability of shielding the delicate mechanism of a magneto when the current generated by its operation would be wasted, and he has remedied the defect not by economy of current, but by stopping the operation of the mechanism, which Bates never attempted to do. Thus we see in applicant's invention, as embodied in claims 1 and 2, both the means is novel and the result is novel over the device relied upon by the Examiner in previously rejecting the claims.

The attention of the Examiner is also called to the following Federal Court Cases in support of applicant's contention:—

Packard vs Lacing, 70 Fed. 66;

Hatch vs Electric, 100 “ 975;

Goss vs. Scott, 108 “ 253;

Imperial vs Crown, 139 “ 312.

Respectfully submitted,

BROWN NISSEN & SPRINKLE

Attorneys for Applicant

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38

(Endorsed) Jan 29 1919

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Defendants' Exhibit No. 54.

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2-260

Div 28 Room 63

Paper No. 12

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

All communications respecting this application should give the serial number, date of filing, title of invention, and name of the applicant.

DEPARTMENT OF THE INTERIOR

RYH

United States Patent Office

Washington

May 9, 1914.

(Rubber stamp) U. S. Patent Office, May 9 1914 Mailed.
Brown, Nissen & Sprinkle,
#1124 Monadnock Block. Chicago,

Ill.

80

Please find below a communication from the Examiner in charge of the application of Edmund Joseph Kane, S. No. 541,428, filed Feb. 2, 1910, Electric Igniters for Explosive Engines.

THOMAS EWING

Commissioner of Patents.

c6-2631

Case considered as amended April 18, 1914.

The claims are finally rejected on the Bates and Weber patents, for the reasons given in the previous office action.

HJS

Benson

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Examiner.

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(Endorsed) Jan 29 1919

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Div 28

(Rubber stamps) Mail Room Oct 22 1914 U. S. Patent
Office U. S. Patent Office, Oct 24 1914 Division XXVIII.

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IN THE UNITED STATES PATENT OFFICE.

Division 28 Room 63,

Edmund Joseph Kane,
Electric Igniters for Explosive Engines,

F Filed February 2, 1910,

Serial No. 541,428.

The Commissioner of Patents,
Washington, D. C.

Sir:

not entered

H. J. S.

F¹

Not
entered

not shown
nor descr. >
show ✓
describe;
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**(In the above entitled application and in accordance with the reasons set forth in the attached affidavit of applicant and the provisions of rule 68, please amend by adding the following claims:*

3. *In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is*

(Endorsed) Jan 29 1919

812

mounted, a push finger mounted upon the con-

*Matter in italics in parentheses, stricken out in original transcript.

tact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

4. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with the yoke, and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

5. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their

541428

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(Endorsed) Jan 29 1919

813

free ends with the said yoke member, an operating arm constituting a part of the integral yoke

*Matter in italics in parentheses, stricken out in original transcript.

member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

6. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combus-

15 of Milton
30 of Kane

V

tion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

7. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to

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(Endorsed) Jan 29 1919

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engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combus-

*Matter in italics in parentheses, stricken out in original transcript.

tion chamber of the engine, and an impact member fixed relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

8. *In a device of the class described, a field magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the field magnet, a yoke mounted upon said shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an ignition spark in the combustion chamber of the engine.)*

Remarks.

The above claims taken from patent No. 1,096,048, granted May 12, 1914, to J. L. Milton, 1 to 6 verbatim thereof, are sought to be entered in accordance with the provisions of Rule 68.

Applicant has just discovered that this Milton patent has been granted, and the claims are entered for the purpose of securing an interference with said patent.

As set forth in the accompanying affidavit of the inventor and applicant, it is expected to be shown that Milton was not the inventor of the subject matter of said claims and that the invention embodied therein was derived from applicant who is the prior and only inventor and disclosed the complete in-
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43

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(Endorsed) Jan 29 1919

815 vention to the patentee Milton while both were in the employ and in the designing room of the Webster Electric Company of Chicago.

The most casual examination of the devices will show that they are practically identical in construction and mode of operation, and as the application of Kane was filed February 2, 1910, almost nine months before the application was filed

*Matter in italics in parentheses, stricken out in original transcript.

on which the Milton patent issued, the latter having been filed October 28, 1910, and patented May 12, 1914, it will be apparent that both applications were pending contemporaneously.

It is also apparent that under the provisions of rule 96 the Examiner should have suggested the claims added by the above amendment to Kane before the Milton patent was passed to issue, and it is to correct this apparent oversight on the part of the Office that applicant now adds these claims by amendment immediately upon the discovery by him that the patent has been granted, and requests that an interference be declared without delay.

Rule 96 is as follows:

"Whenever the claims of two or more applications differ in phraseology, but cover substantially the same patentable subject-matter, the Examiner, when one of the applications is ready for allowance, will suggest to the parties such claims as are necessary to cover the common invention in substantially the same language."

The Examiner's attention is called to the subject-matter embraced in original claims 8, 9, 10, 11, 12, 13 and 15 of the Kane application as originally filed on February 2, 1910.

While these claims are not in the exact language of the 541428

44

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(Endorsed) Jan 29 1919

816 claims of the patent with which interference is sought, they are essentially the same subject-matter and the showing in the drawings and specification seems to be identical, with the possible exception of one little detail wherein Milton shows the eccentric means connected with the starting lever 29 for raising and lowering the roller 23, and a slightly modified form of the device for rendering the engine reciprocating rod inoperative. Otherwise, it will be seen that the devices as shown and described are practically identical, or as nearly so as it would be possible for two draftsmen and solicitors to prepare identical specifications and drawings of the same device.

The Examiner's attention is also directed to claims 15 and 16 of the amendment of March 15, 1911, taken in connection with the statement contained in the paragraph from line 57 to line 65, page 1 of the Milton patent.

Attention is also directed to claims 17 and 18 contained in the amendment of March 16, 1911, directed to the same sub-

ject-matter but phrased somewhat differently from the claims above referred to taken from the Milton patent, which, since it was filed October 28, 1910, was of course pending in March, 1911.

It is believed that a consideration of the above facts apparent on the record will indicate that there has been an oversight on the part of the Office in failing to suggest to applicant, under the provisions of Rule 96, he being the senior party, the above claims, prior to the grant of the Milton patent, and to correct this apparent error and to restore applicant's rights, *nunc pro tunc*, under under Rule 96 that this

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(Endorsed) Jan 29 1919

817 amendment is filed and it is requested that an interference be declared in due course.

The Examiner's attention is called to the fact that there can be no question as to intervening rights (*Miller v. Brass Co.*, 104 U. S. 352; *Railroad Co. v. Sayles*, 97 U. S. 554; *Bechman v. Wood*, 15 App. D. C. 484) but it is submitted that the present case, in view of applicant's affidavit regarding disclosure of the invention to the patentee Milton in the year 1909, in the City of Chicago, brings the present case under the doctrine laid down in *Lotz v. Kenny*, 135 O. G. 1801; *Phillips v. Sensenich*, 134 O. G. 1806; *McBerty v. Cook*, 16 App. D. C. 133; *Luger v. Browning*, 21 App. D. C. 201; *Furman v. Dean*, 24 App. D. C. 277.

Respectfully submitted,

BROWN NISSEN & SPRINKLE
Attorneys for Edmund J. Kane.

Chicago, Illinois,
October 13, 1914.

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(Endorsed) Jan 29 1919

818 (Rubber stamps) Mail Room Oct 22 1914 U. S. Patent Office. U. S. Patent Office, Oct 24 1914 Division XXVIII.

IN THE UNITED STATES PATENT OFFICE.

Division 28, Room 63,
Edmund Joseph Kane,
Electric Igniters for Explosive Engines,
Filed February 2, 1910,
Serial No. 541,428.

AFFIDAVIT.

State of Illinois }
County of Cook } ss.

EDMUND JOSEPH KANE, whose application for Letters Patent for an improvement in Electric Igniters for Explosive Engines, Serial No. 541,428, was filed in the U. S. Patent Office on or about the 2nd day of February, 1910, being duly sworn, deposes and says that he has carefully considered the subject matter of the attached amendment to his aforesaid application, which amendment has been prepared in conference with his attorneys of record, Brown, Nissen & Sprinkle; that he understands the subject matter of the new claims 3 to 8 inclusive, which are submitted in the accompanying amendment to his said application; these claims being taken verbatim from a patent granted May 12, 1914, to John L. Milton of Tiffin, Ohio, No. 1,096,048.

Affiant further states that he has carefully examined the drawings and specification of the said Milton patent and it is directed to subject matter practically identical with the disclosure contained in applicant's original specification and drawings as filed February 2, 1910.

541428

47

(Endorsed) Jan 29 1919

819 Affiant further states that he has examined carefully the file record of his application and he finds that as his application was originally filed and as it continued for a long time during the prosecution of the same it contained a number of claims, such for example as claims 8 to 13 and claim

15 of the application as originally filed on February 2, 1910, which are directed to the same subject matter as the six claims of the Milton patent numbered in the said amendment as claims 3 to 8 inclusive. Affiant also finds that claims 15 and 16 of the amendment of March 15, 1911, and claims 17 and 18 contained in the amendment of March 16, 1911, are directed to the same subject matter but phrased somewhat differently from the claims above referred to taken from the Milton patent, and that since the Milton patent application was filed October 28, 1910, it was, of course, pending in March 1911, wherefore applicant is advised that the Examiner, under Rule 96, would have been warranted in suggesting the claims of the Milton patent to Affiant when the Milton application was in condition for allowance and prior to its allowance under the provisions of Rule 96.

Affiant further states that a careful examination of claim 4 of the Milton patent shows that this claim is directed to a combination of elements, among others, of "means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm." This means may be the lever 44 of the Milton patent (See Fig. 1) or it may be the shifting roller 61 and its cooperating cam 64 on the reciprocating rod of the engine shown in applicant's drawings. Since all of the other elements of the claim are found in Affiant's application if they are found in the device of the 541428

48

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(Endorsed) Jan 29 1919

820 Milton patent because, as stated, the two are identical,

Affiant is of the opinion that the disclosures of the Milton patent and Affiant's application in view of applicant's claims, which are in condition for appeal, and claim 4 of the Milton patent should have been sufficient grounds for the suggestion of the Milton claims to applicant by the Examiner under the provisions of Rule 96.

Affiant will state further that he expects to prove the invention of the five claims of the Milton patent No. 1,096,048 was Affiant's invention and that it was communicated to John L. Milton while both Affiant and said Milton were in the employ of the same manufacturing concern in the City of Chicago in the year 1909, and that the said Milton was not only not the first inventor of the subject matter of the patent but

that he was not the inventor of any part of the invention as claimed in said claims 1 to 6 inclusive, of the Milton patent.

Affiant states that the invention as it appears in the drawings of his application was disclosed to his attorneys and was substantially claimed in the claims referred to which were pending contemporaneously with the Milton patent and at the time of the grant of the six claims of the Milton patent.

Affiant further states that it is not his desire to abandon the subject matter of the claims submitted by the accompanying amendment and the reason why these identical claims were not sooner submitted is that applicant was not, prior to this time, aware of the grant of these claims to John L. Milton, and Affiant has been, until the present time, in ignorance of the fact that John L. Milton or any other person or

541428
49

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(Endorsed) Jan 29 1919

821 persons had set up a claim to the invention disclosed in said application.

Affiant further affirms that had he been advised prior to this time by the Examiner under the provisions of Rule 96 of these claims made by said John L. Milton covering the common subject matter of the Milton patent and Affiant's application, he would have made these identical claims heretofore and at the earliest possible moment, and that the error, if there has been one on his part, has arisen through inadvertence, accident or mistake and without any fraudulent or deceptive intention.

Further Affiant saith not.

EDMUND JOSEPH KANE.

Subscribed and sworn to before me this 15th day of October 1914.

WM C. WRATH
Notary Public.

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(Endorsed) Jan 29 1919

Div. 28 Room 63 346

Paper No. 14

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

All communications respecting this application should give the serial number, date of filing, title of invention, and name of the applicant.

DEPARTMENT OF THE INTERIOR

RYH.

United States Patent Office

Washington

Nov. 12, 1914.

(Rubber stamp) U. S. Patent Office, Nov 12 1914 Mailed.
Brown, Nissen & Sprinkle,
#1124 Monadnock Block, Chicago.

III.

Please find below a communication from the Examiner in charge of the application of Edmund Joseph Kane, S. No. 541,428, filed Feb. 2, 1910, Electric Igniters for Explosive Engines.

c6—2031

THOMAS EWING
Commissioner of Patents.

Case considered as amended Oct. 22, 1914.

The claims copied from the patent have not been entered in this case, since the amendment presenting these claims is not a proper response to the preceding office action. Applicant's showing as to why the claims were not earlier presented is deemed insufficient to warrant the admission of the claims under Rule 68.

As an additional reason why the patented claims cannot be permitted in this case, it is pointed out that the claims of the patent define an invention different from that defined by the claims remaining in this case. The claims of the patent are drawn to a magneto or spⁱr^ak^er, while the claims in this case are drawn to a combined valve and sparker operating means. These two devices are separate inventions, and are separately classified in this office; hence claims to both cannot be now permitted in this case.

If applicant wishes to contest in interference the invention covered by the claims of the patent, he can do so only by filing a divisional application of this case and presenting therein the claims of the patent.

Applicant should make an action properly responding to the office action of May 9, 1914, on or before May 9, 1915, or the case will become abandoned on the latter date. See Rules 68 and 171.

F M HOPKINS

Asst Examiner in charge

HJS

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(Endorsed) Jan 29 1919

(Rubber stamps) Docket Clerk (date not legible) U. S. Patent Office \$10.00 received Feb 23 1915 Chief Clerk U. S. Patent Office U. S. Patent Office, Feb 25 1915 Division. XXVIII.

IN THE UNITED STATES PATENT OFFICE.

Edmund Joseph Kane,
Electric Igniters,
For Explosive Engines,
Filed February 2, 1910,
Serial Number 541,428,
Division 28, Room 63.
The Commissioner of Patents,
Washington, D. C.

Sir:—

We hereby appeal to the Examiners-in-Chief from the decision of the Primary Examiner in the above entitled application for Letters Patent, which was rejected the second time on May 9, 1914.

The following are the grounds on which the appeal is taken:

1. The Examiner erred in holding that the references of record anticipate the claims.
2. The Examiner erred in finally rejecting the claims on the reference Bates, in view of the reference Weber, of record.
3. The Examiner erred in not allowing the claims for the reasons given.

An oral hearing is requested.

Respectfully submitted,

BROWN NISSEN & SPRINKLE
Attorneys for Kane.

Chicago, Illinois,
February 19, 1915.
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Check for \$10.00 herewith.
(Endorsed) Jan 29 1919

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Paper No. 16.

(Rubber stamp) U. S. Patent Office, Feb 27 1915
Mailed.

IN THE UNITED STATES PATENT OFFICE.

| | | |
|---|---|---|
| In re application of Edmund Joseph Kane, S. No. 541,428, filed Feb. 2, 1910, Electric Igniters for Explosive Engines. | } | Before the Examiners-in-Chief, on Appeal. |
|---|---|---|

EXAMINER'S STATEMENT.

The appealed claims are:

1. In an explosive engine, the combination with a magneto, of means for operating the magneto by the running of the engine, a speed governor operated by the engine, and means under the control of the speed governor for rendering the magneto operating means inoperative when the engine passes or exceeds a predetermined speed.

2. The combination in an explosive engine having a speed governor, and an exhaust valve operating rod operatively connected with the speed governor, of a magneto, means for operating the magneto by the running of the engine, and means adapted to be operated by the movement of the exhaust valve operating rod for rendering the magneto operating means inoperative.

The references are:

Bates, 946,816, Jan. 18, 1910 (123-152)

Weber, 820,535, May 15, 1906 (123-149).

This invention relates to a combined sparker and valve operating mechanism.

As shown and described, the invention relates to that class of devices in which the speed of an engine is regulated by holding the exhaust valve open and rendering the igniter inoperative when the speed of the engine exceeds a predetermined value.

53

(Endorsed) Jan 29 1919

825

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(Kane, 541,428).

terminated value. The igniter is of the oscillating magneto type and is shown in dotted lines in Fig. 1 secured to the side of the engine cylinder 1. The magneto is actuated by the trip rod 36 engaging the finger 35 secured to the

shaft of the magneto armature. The exhaust valve 43^b in the cylinder head is operated by the reciprocating rod 43. The main shaft 5 of the engine has secured thereto a fly-wheel carrying the centrifugal governor weights 50, 51, which, when the speed of the engine becomes excessive, are thrown out, thereby causing the latch 56 to be depressed and engage a notch in the member 57 to hold the exhaust valve open. The member 57 is secured to the valve operating rod 43. When the exhaust valve is thus held open, the roller 61 carried by the rod 43 engages the wedge block 64 mounted on the magneto trip-rod 36. This raises the rod 36 so that it will not engage the magneto operating finger 35 (see dotted line construction in Fig. 3). By this means, wear of the magneto parts and the production of useless sparks are avoided.

As defined by the claims, the invention comprises broadly the combination of a speed governor, a magneto, an exhaust valve, operating means for the magneto and valve, and means operated by the exhaust valve operating means to render the magneto inoperative.

The Bates patent discloses a device similar to applicant's. The exhaust valve is operated by the rod 12 and is held open by the governor when the engine speed becomes too great. An igniter 11, apparently of the make-and-break type, is secured in the side of the engine cylinder 10 and is operated by the trip rod 13. A rocker 21 is pivoted at 20 and carries

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(Endorsed) Jan 29 1919

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(Kane, 541,428).

a roller 22 adapted to engage the trip rod 13. The rocker is adapted to be engaged by a pin or stud 23 secured to the exhaust valve operating rod 12. When the exhaust valve is held open through the action of the governor, the pin 23 oscillates the rocker 21 to lift the trip rod 13 into inoperative position. Thus the igniter remains inactive when the ex-

The Weber patent shows an oscillating magneto, similar to applicant's, mounted on the side of an engine cylinder 1. The exhaust valve is open, and wear and the production of useless sparks are avoided.

and adapted to be operated by a trip arm 35.

The claims are rejected on the Bates patent, modified in view of the Weber patent, it being held that there would be

no invention in substituting Weber's igniter or magneto for the igniter shown by Bates. The Bates patent shows the combination claimed, differing therefrom only in the form of means used to produce the spark.

It may be added that applicant, Bates, and Weber all employ make-and-break igniters of similar construction, applicant and Weber having their igniters secured directly to and operated with the magneto or source of electrical energy, while Bates' igniter is separated from the source of electrical energy, which latter is not shown.

HJS

Feb. 27, 1915,

Div. 28, Room 63.

BROWN, NISSEN & SPRINKLE,
#1124 Monadnock Block,
Chicago, Ill.

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(Endorsed) Jan 29 1919

A R BENSON

Examiner.

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2—201

Copy

Address only Appeal No. 8302. Paper No. 17
The Commissioner of Patents, Paper No.
Washington, D. C. Notice of Hearing

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

March 5, 1915,

Sir:

Serial

The case of Edmund Joseph Kane ^{*}(*Intf.*) No. 541,428, will
^{*}(*Commissioner*)
be heard by the Examiners-in-Chief on the 7th day of April,
1915. ^{*}(*ten*)

The hearings will commence at one o'clock, and as soon as the argument in one case is concluded the succeeding case will be taken up.

If any party, or his attorney, shall not appear when the

^{*}Matter in italics in parentheses, stricken out in original transcript.

case is called, his right to an oral hearing will be regarded as waived.

The time allowed for arguments is as follows:

Ex parte cases, thirty minutes;

Motions, thirty minutes, each side;

Interference appeals, final hearing, one hour each side.

By special leave, obtained before the argument is commenced, the time may be extended.

The appellant shall have the right to open and conclude in interference cases, and in such case a full and fair opening must be made.

Briefs in interference appeals must be filed in accordance with the provisions of Rule 147.

Respectfully,

THOMAS EWING
Commissioner of Patents.

To BROWN, NISSEN & SPRINKLE—*Attys.*

1124 Monadnock Bl'd'g,

Chicago, Ill,

541428

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To

6—1961

(Endorsed) Jan 29 1919

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Appeal No. 8302 Paper No. 18
Brief.

(Rubber stamps) (Not legible) Mar 31 1915 U. S. Patent
Office. Examiner-in-Chief Mar 31 1915 U. S. Patent Office.

IN THE UNITED STATES PATENT OFFICE.

| | |
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| In re Application of Edmund Joseph Kane, Serial Number 541,428, Filed February 2, 1910, Electric Igniters for Explosive Engines. | } Before the Examiners-in-Chief, On Appeal. |
| | |

BRIEF.

—O—

The appealed claims are:

1. In an explosive engine, the combination with a magneto, of means for operating the magneto by the running of

the engine, a speed governor operated by the engine, and means under the control of the speed governor for rendering the magneto operating means inoperative when the engine passes or exceeds a predetermined speed.

2. The combination in an explosive engine having a speed governor and an exhaust valve operating rod operatively connected with the speed governor, of a magneto, means for operating the magneto by the running of the engine, and means adapted to be operated by the movement of the exhaust valve operating rod for rendering the magneto operating means inoperative.

The Primary Examiner has rejected the above claims, and from his decision applicant has appealed, the references upon which the Examiner relied having been as follows:—

541428

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(Endorsed) Jan 29 1919

829

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Bates, No. 946,816, January 18, 1910. Igniter-Gear for Explosive Engines; and,

Weber, No. 820,535, May 15, 1906. Electric Igniter for The Examiner's position is well stated in his summary on page 3 of the statement, in which he says:—

“The claims are rejected on the Bates patent, modified in view of the Weber patent, it being held that there would be no invention in substituting Weber's igniter or magneto for the igniter shown by Bates. The Bates patent shows the combination claimed, differing therefrom only in the form of means used to produce the spark.”

At the out-set, the attention of the Honorable Board is directed to the Examiner's statement as above quoted, in which he says that Bates shows the combination claimed, and then in the last clause of the same sentence virtually admits that he does not show the combination claimed, because he admits that Bates differs from applicant's combination in the form of means used to produce the spark.

with reference to a magneto
If we refer to the Bates patent, it will be found that [^] it is as silent as the sphinx. The part 11 is referred to in the specification of Bates as the igniter-electrode and the Bates specification makes it clear that the lifting of the igniter trip-rod 13 will “eliminate the spark which would otherwise

result." It may be assumed possibly as the Examiner assumes, that Bates intended to connect a battery with the electrode 11, which was probably intended to represent the usual movable electrode, so that when the electrode 11 is

541428

58

(Endorsed) Jan 29 1919

830

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tripped, a spark will result. The Bates device clearly shows how to economize battery current by eliminating the spark through the shifting of the rocker-arm 21 by the exhaust valve operating rod when the exhaust valve is held open by the shifting of the rod 12 to the open position. As a matter of fact, Bates was not the first to devise means for economizing battery current by stopping the operation of a make-and-break sparking device under the control of the exhaust valve operating rod or of a speed governor. An inspection of the file of the Bates patent shows that the broader claims of Bates were all rejected upon the following earlier United States patents, all of which show means of various kinds for economizing battery current when the exhaust valve of a hydro-carbon engine is held open by a speed governor:

No. 597,326, Quast, January 11, 1898;

No. 624,975, Quast, May 16, 1899;

No. 844,759, Stickney, February 19, 1907;

No. 862,599, Witry, August 6, 1907.

Reference is made to this prior art, and to the Olds patent, No. 635,506, October 24, 1899, as being prior patents, all showing means for economizing battery current by the stopping of the operation of a make-and-break sparking mechanism when the engine is idling, because the speed governor holding open the exhaust valve, prevents the drawing in or compressing of a combustible charge.

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(Endorsed) Jan 29 1919

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The Examiner admits that the Bates patent does not meet applicant's claims, and this is obvious because the magneto is made an element of each of the claims, but the Examiner refers to the Weber patent as an example in the prior art of a magneto of the oscillating type, and makes

the statement that no invention would be required in adapting the Bates device to stop the operation of the Weber magneto, whenever the exhaust valve operating rod is held to a position to open the exhaust valve, by reason of its control through the speed governor.

We submit at the out-set that while the Examiner's position looks reasonable to one examining the condition of this art at the present time, there is absolutely no evidence to show that with the Bates device before him, any mechanic could produce the device of this Kane application. On the contrary, it is submitted that the evidence is all against the Examiner, because the Weber device of oscillating magneto goes back as early as 1903, for we find his application was filed on February 16 of that year, and the patent was granted as early as May 15, 1906. Then we have not only the Bates patent showing how to cut out the operation of a battery sparking device, as granted on January 18, 1910, but we have the prior art patents preceding Bates, to which we have already referred, namely, the two patents to Quast, and the Stickney, Witry and Olds patents. Yet, with all these prior constructions before designers of ignition devices for explosive engines, no one prior to Kane appears to have found

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(Endorsed) Jan 29 1919

832

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out it was desirable or showed how to stop the oscillation of the magneto when its current was not needed. As the Supreme Court of the United States said, in the well-known case of *Potts v. Creager*, 155 U. S., 608:

"The apparent simplicity of a new device often leads an inexperienced person to think that it would have occurred to anyone familiar with the subject. But the decisive answer is that with dozens and perhaps hundreds of others laboring in the same field, it had never occurred to anyone before. The practiced eye of an ordinary mechanic may be safely trusted to see what ought to be apparent to everyone."

If the Examiner's contention is true, or is a reasonable hypothesis, then it would seem to follow that Bates having shown how to adapt the device of his patent No. 946,816, to stop the operation of the movable electrode in a sparking device, would at the same time, in view of the prior Weber

patent No. 820,535 showing the oscillating magneto, have given to the world what Kane has produced as the result of great experimentation and effort at a later day.

To apply the Examiner's argument, let us see what a mechanic, having before him the Bates and the Weber devices, could produce in view of what the Examiner thinks is obvious.

Bates shows how to stop the operation of the movable electrode when the exhaust valve operating rod shifts under the control of the speed governor. Now, if we apply this teaching of the Bates patent to the Weber construction, let 541428

61

(Endorsed) Jan 29 1919

833

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us see what the mechanic would produce. The arm 26 of the Weber corresponds to the arm 11 of the movable igniter-electrode of Bates. The oscillating member 13 operates this arm, and the vibrating arm 41 of Weber is the part that co-operates with the electrode arm 26. If, therefore, we make a connection between the exhaust valve operating rod and the electrode operating part 41 of Weber, so that the electrode remains inoperative when the exhaust valve is held open by the action of the speed governor, then we would not have in the Weber device thus modified the equivalent of applicant's device, because, while the movable electrode would remain stationary, the magneto would continue to oscillate, which is the very result that the Kane device is intended to obviate.

But the above is not what applicant has shown. He has provided means for stopping the oscillation of the magneto as well as the movement of the electrode of the make-and-break sparking device, and this is what he claims. Surely, the Examiner's contention that no invention would be required to do what applicant has done is entirely refuted by this record, in which some half dozen or more able designers and inventors were groping with the problem of producing a satisfactory ignition device, and has produced a make-and-break battery igniter, with a cut-out under the control of the governor and the shift of the exhaust valve operating rod, and had produced an oscillating magneto, but had failed to show how to stop the wear and tear on the magneto when

its current was not needed. Perhaps these prior designers
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(Endorsed) Jan 29 1919

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had not, like Kane, discovered how wasteful their devices were in hammering away and producing the ignition sparks when they were not needed. As one court has remarked, it oftentimes takes as fine a degree of discernment to recognize and point out the weak points in a device as it does to provide the necessary means of remedying the same. The applicant Kane ascertained that one of the enemies of the oscillating type of magneto was the construction which necessitated its continuous production of the sparking current whether its services were needed or not. Everyone who has watched the operation of a governor controlled explosive engine knows that particularly when it is running on light loads its governor control causes it to miss a great many explosions, and the Kane invention insures that there will be no wear and tear on the oscillating magneto when the engine is missing these explosions, and the ignition current is not needed. We submit that what Kane has done was unmistakably not pointed out in any of the prior art to which the Examiner has referred, and was certainly not put in such form in the Bates and Weber patents as to make it available for commercial use or the use of the public. We shall presently show that immediately after the Kane device was given to the public it sprang into general favor, and many thousand have been manufactured and sold, and there is an ever widening market for the same wherever gasoline is used for a fuel on the simpler types of engines which are controlled by gov-
541428 63

(Endorsed) Jan 29 1919

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errors connected with the exhaust valve operating devices. The Examiner has said that what Kane did does not arise to the dignity of invention, in view of Bates and Weber. We believe that Kane gave to the public a valuable and novel invention, and if measured by the test laid down by the United States Circuit Court of Appeals for the Seventh Circuit, in the case of General Electric Company vs. Sangamo Electric Company, 174 Fed. Rep., at page 251. Kane has made a valuable and patentable improvement. The language of the court, to which we refer, is as follows:—

“Invention, in the nature of improvement, is the double mental act of discerning, in existing machines or processes or articles, some deficiency, and pointing out the means of overcoming it.”

What Kane did was to perform the double act here referred to. That is, he discerned there was a deficiency in the common types of oscillating magnetos like that devised by Weber, and the deficiency was that they continued to pound away, wearing themselves out and generating useless current when there was no charge in the cylinder to be exploded. But Kane not only discerned this defect, but went further and pointed out the means of overcoming it. It is true he used parts of the Bates device, but he added the magneto to the combination, so that his completed invention is a decidedly different combination and produces a different result from either Bates or Weber, or from the two devices combined, as we have seen.

It is believed that these claims should be given to the applicant.

(Endorsed) Jan 29 1919

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plicant Kane, as he was the first to discover the desirability of stoppage of the oscillation of a magneto under the conditions mentioned, and the first to provide means in connection with a magneto for this purpose. No harm can be perpetrated upon the public by granting these claims to Kane, because it is not shown that prior to his invention anyone had ever made a device of this character. In fact, in all of the art cited by the Examiner, there is not an intimation that anyone prior to Kane had ever perceived of the necessity or desirability which is now so obvious that thousands of these devices are in every-day use, of providing means for stopping the operation of the magneto when it is not needed, because of the governor control of the exhaust valve of the motor or engine.

Bates might have, without very much invention, adapted his device to operate upon a magneto, had he discerned the defect in such existing machines, but Bates was working evidently with battery forms of ignition, and if it had not been for Kane, the world would probably still be without this invention, for there is no intimation that Weber recognized that it was a good thing to stop the operation of the magneto when its effort was not needed, and hence stop its pounding action, and increase its life length, and had he known of the

desirability of this feature in the magneto, there is nothing to show that he knew anything of the Bates device, or that he could have given the Kane invention to the public. Suffice it to say that he was in the field prior to Kane, and even prior

541428 65

(Endorsed) Jan 29 1919

837

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to Bates, and all he gave to the world is embodied in his patent, and it does not anticipate Kane's invention.

Attention is directed to an affidavit of the applicant attached hereto and an affidavit of Maurice Kane corroborating certain facts set forth by applicant regarding the extent of use to which the invention has been put.

The fact that one Company alone had made for it and has sold more than thirty-five (35,000) thousand ignition devices embodying the invention is evidence of its importance and practicability. It is believed that these figures alone, showing the popularity and importance of the invention, conclusively refute the Examiner's contention that, in view of Bates & Weber, there was no invention in devising the ignition mechanism claimed by applicant in the two claims on appeal, and for these reasons applicant submits that this Honorable Board should reverse the Examiner's decision and allow the claims to him.

Respectfully submitted,

BROWN NISSEN & SPRINKLE
Attorneys for Edmund Joseph Kane.

541428 66

(Endorsed) Jan 29 1919

838 IN THE UNITED STATES PATENT OFFICE.

In Re Application of Edmund Joseph Kane, Serial No. 541,428, filed February 2, 1910, Electric Igniters for Explosive Engines. } Before the
Examiners-in-Chief
On Appeal.

State of Illinois, }
County of Cook. } ss.

(Rubber Stamp) Examiner-in-Chief Mar 31 1915 U. S. Patent Office.

EDMUND JOSEPH KANE, being first duly sworn, says:

I am a citizen of the United States, of legal age, and residing at Chicago, in the County of Cook, and State of Illinois, and am the applicant in the above entitled application now on appeal before the Board of Examiners-in-Chief. At the time the invention embodied in the claims on appeal was made by me, I was connected with a Chicago firm manufacturing Ignition Devices for Gasoline Engines, and know, from my personal observation and from investigations I have made that after this invention was perfected by me, just prior to the filing of my application for patent, it was widely adopted for use on the igniters of gasoline engines, and among others, was used to a very great extent by the International Harvester Company. I made investigations from which I have ascertained that upwards of thirty-five thousand (35,000) gasoline engines have been made and sold by the International Harvester Company equipped with the invention embodied in these claims on appeal, and find that the device has in the hands of users given universal satisfaction, and the devices are now for the most part, in so far as I have been able to ascertain, in successful use in the hands of purchasers, and the demand for the invention on gasoline using engines continues.

And further affiant saith not.

EDMUND JOSEPH KANE

Subscribed, and sworn to before me this 25th day of March, A. D. 1915.

WM. C. WRATH.

541428—67

(Endorsed) Jan 29 1919

839

IN THE UNITED STATES PATENT OFFICE.

In Re Application of Edmund Joseph Kane, Serial No. 541,428, filed February 2, 1910, Electric Igniters For Explosive Engines. } Before the Examiner-in-Chief. On Appeal.

State of Illinois, } ss.
County of Cook

MAURICE KANE, being first duly sworn, says:

I am a citizen of the United States, residing at Chicago, in the County of Cook, and State of Illinois; for a number of years, dating back to the date of its organization in 1902, I have been connected with the designing and mechanical engineering corps of the International Harvester Company, and am familiar with the construction and mode of operation of explosive engines. I am familiar with the character of the invention of Edmund Joseph Kane, as embodied in application, Serial Number 541,428, filed February 2, 1910, on Electric Igniters For Explosive Engines, on appeal; I have read and understand the claims on appeal, and have been familiar with the practical working of the device of this Kane patent since it was perfected by the inventor. The manufacture and sale of the device as embodied in these appealed claims was begun by the International Harvester Company, I find, by referring to a decision of the Experimental Department, in the month of August or in the month of September, 1909, the decision in question bearing date of August 30, 1909. I am familiar with the extent to which these devices have been manufactured and sold as embraced in the appealed claims of this application, and can state that the device has been very successful, and has gone into general use on gaso-

541428 68

(Endorsed) Jan 29 1919

840

—2—

line engines sold by the International Harvester Company making use of the oscillating type of magneto. I have supplemented my general knowledge by carefully examining the sales records, and find that upwards of thirty-five thousand (35,000) of these ignition devices embodying the claims of this application on appeal have been, since the autumn of

1909, made and sold by the International Harvester Company, and I know that the same are and have been continuously in successful operation in the hands of purchasers.

And further affiant saith not.

MAURICE KANE

Subscribed and sworn to before me, this Twenty-fifth (25th) day of March, A. D., 1915.

NANCY DILLON

*Notary Public, Cook County,
Illinois.*

541428 69

(Endorsed) Jan 29 1919

841

J.R.S.

Hearing,

Apr. 7, 1915.

Appeal No. 8302.

Appeal No. 8302 Paper No. 19
Decision.

June 26, 1915.

UNITED STATES PATENT OFFICE.

Before the Examiners-in-Chief.

Application of Edmund Joseph Kane for a patent for an improvement in Electric Igniters for Explosive Engines, filed February 2, 1910, Serial No. 541,428.

Messrs. Brown, Nissen & Sprinkle, attorneys for appellant.

The applicant has appealed from the action of the primary examiner finally rejecting the following claims:

1. In an explosive engine, the combination with a magneto, of means for operating the magneto by the running of the engine, a speed governor operated by the engine, and means under the control of the speed governor for rendering the magneto operating means inoperative when the engine passes or exceeds a predetermined speed.

2. The combination in an explosive engine having a speed governor, and an exhaust valve operating rod operatively connected with the speed governor, of a magneto, means for operating the magneto by the running of the engine, and means adapted to be operated by the movement of the exhaust valve operating rod for rendering the magneto operating means inoperative.

(Rubber Stamp) U. S. Patent Office, Jan 21 1916 Division XXVIII

IN THE UNITED STATES PATENT OFFICE.

| | | |
|--|---|------------------------------------|
| In re Application of Edmund Joseph Kane S. No. 541,428 Filed Feb. 2, 1910 | } | Igniters For Explosive Engines. |
|--|---|------------------------------------|

To the Commissioners of Patents:

Sir:

In the above entitled case please permit Edward E. Clement, Washington, D. C. to have access to the file of the case until February first, nineteen sixteen, after which this power to inspect shall become void, unless extended.

Very respectfully,

BROWN, NISSEN & SPRINKLE

By ARTHUR L. SPRINKLE

Attorneys for E. J. Kane.

Washington, D. C.

Jan 21, 1916.

541428 72

(Endorsed) Jan 29 1919

(Rubber stamp) Docket Clerk Apr 25 1916 U. S. Patent Office

UNITED STATES PATENT OFFICE

| | |
|--|-------------------------|
| Applicant—Edmund Joseph Kane | Case |
| Invention—Electric Igniters for Explosive Engines. | Div 28 |
| Serial No.—541,428 | Filed February 2, 1910. |

Chicago, April 20, 1916.

Hon Commissioner of Patents,
Washington, D. C.

Sir:

I, Edmund Joseph Kane, of Chicago, in the County of Cook and State of Illinois, do hereby revoke all powers of attorney heretofore executed by me and do hereby appoint Lynn A. Williams and Clifford C. Bradbury, of the co-partnership of Williams and Bradbury (Reg. No. 10,473), 720

Monadnock Block, Chicago, Illinois, my attorneys, with full power of revocation and substitution, to prosecute my application for United States Letters Patent Serial No. 541,428, filed February 2, 1910, for an improvement in Electric Igniters for Explosive Engines, to make alterations and amendments therein, to receive the patent and transact all business in the Patent Office connected therewith.

Signed at Chicago, in the County of Cook and State of Illinois, this 20th day of April, A. D. 1916.

EDMUND JOSEPH KANE

(Rubber stamp) Accepted May 1 1916 Accepted R. F. Whithed Assistant Commissioner.

(Documentary 25c Internal Revenue stamp.)

541428—73

(Endorsed) Jan 29 1919

845 48

EEG

2—069

23

Address Only

The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR

United States Patent Office,

Washington, D. C.

May 2, 1916

You are hereby informed that Your Power of Attorney Has
Revoked
Been * (*Accepted*) in the matter of the application of Edmund Joseph Kane for Letters Patent for an Improvement in Electric Igniters for Explosive Engines No. 541,428 Filed Feb. 2, 1910

Very respectfully,

THOMAS EWING,
Commissioner.

Brown, Nissen & Sprinkle
1124 Monadnock Block
Chicago, Ill.

541428—74

(Endorsed Jan 29 1919)

*Matter in italics in parentheses, stricken out in original transcript.

570

Defendants' Exhibit No. 54.

846 48½

EEG

Serial No. 541428 Paper No. * (22)²³
2—069

Address Only
The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR,
United States Patent Office,
Washington, D. C.

May 2, 1916

You are hereby informed that Your Power of Attorney Has
Been * (*Rejected*) in the matter of the application of Edmund
Accepted

Joseph Kane for Letters Patent for an Improvement in Elec-
tric Igniters for Explosive Engines No. 541,428 Filed Feb. 2,
1910

Very respectfully,

THOMAS EWING,
Commissioner.

Williams and Bradbury
720 Monadnock Block
Chicago, Ill.

541428 75

(Endorsed) (Jan 29 1919)

*Matter in italics in parentheses, stricken out in original transcript.

847 (Rubber stamp) Docket Clerk June 26 1916, U. S. Patent Office \$20 Rec'd Jun 26 1916 C. C. U. S. Patent Office.
Serial No. 541,428 Paper No. 24
Dec

UNITED STATES PATENT OFFICE

| | |
|---------------------------------|-------------------------|
| Applicant—Edmund Joseph Kane | Case 1. |
| Invention—Electric Igniters for | Room 63 |
| Explosive Engines | Div. 28 |
| Serial No.—541,428 | Filed February 2, 1910. |
| (In left-hand margin) H by—E B. | |

1315 Monadnock Block,
Chicago, Ill., June 23, 1916.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

I hereby appeal to the Commissioner in person from the decision of the Examiners in Chief in the matter of my application for Letters Patent for an improvement in Electric Igniters for explosive engines filed February 2, 1910, Serial No. 541,428. The following are assigned as reasons of appeal:

1. The Examiners in Chief erred in holding that the references of record anticipate the applicant's claims.
2. The Examiners in Chief erred in affirming the action of the Primary Examiner finally rejecting the claims on the reference Bates in view of the reference Weber of record.
3. The Examiners in Chief erred in not reversing the action of the Primary Examiner finally rejecting the claims on the references of record.

An oral hearing is requested.

Respectfully submitted,

EDMUND JOSEPH KANE,

By WILLIAMS & BRADBURY

LYNN A. WILLIAMS,

Attorneys.

Check for \$20.00 to
cover appeal fee is
sent herewith.

541428 76

(Endorsed) Jan 29 1919

848 EEG

2—201

Address Only
The Commissioner of Patents,
Washington, D. C.

Paper No. 25

DEPARTMENT OF THE INTERIOR,
United States Patent Office
Washington

Sir:

July 1, 1916

The case of Edmund J. Kane, }
Electric Igniters for } Appeal to Commissioner.
Explosive Engines. }

Serial

Commissioner

*(*Intf.*) No. 541,428, will be heard by the *(*Examiner in Chief*)
on the 19th day of July, 1916.

ten

The hearings will commence at *(*one*) o'clock, and as soon
as the argument in one case is concluded the succeeding case
will be taken up.

If any party, or his attorney, shall not appear when the
case is called, his right to an oral hearing will be regarded
as waived.

The time allowed for arguments is as follows:

Ex parte cases, thirty minutes;

Motions, thirty minutes, each side;

Interference appeals, final hearing, one hour each side.

By special leave, obtained before the argument is com-
menced, the time may be extended.

The appellant shall have the right to open and conclude in
interference cases, and in such cases a full and fair opening
must be made.

Briefs in interference appeals must be filed in accordance
with the provisions of Rule 147.

Respectfully,

THOMAS EWING,

.. Commissioner of Patents.

To Williams and Bradbury
720 Monadnock Block
Chicago, Ill.

541428 77

(Endorsed) Jan 29 1919

*Matter in italics in parentheses, stricken out in original transcript.

849

Serial No. 541,428 Paper No. 25
(Rubber stamps) Docket Clerk July 12 1916 U. S.
Patent Office U. S. Patent Office, Jul 14 1916 Division
XXVIII. U. S. Patent Office, Jul 14 1916 Division XXVIII.
Approved Jul 12 1916 Thomas Ewing Commissioner of Pat-
ents.

UNITED STATES PATENT OFFICE

Applicant—Edmund Joseph Kane
Invention—Electric Igniters for
Explosive Engines

Case 1.
Room 63
Div. 28

Serial No.—541,428

Filed February 2, 1910.

Petition to the Honorable Commissioner of Patents.

Sir:

Your petitioner respectfully requests your Honor to re-
mand this application to the Primary Examiner directing the
Primary Examiner to reconsider this application and the
claims therein in view of recent developments and the con-
tents of the accompanying affidavit of Walter Brown.

Applicant has just taken an appeal from a decision of the
Examiners in Chief affirming the action of the Primary Ex-
aminer finally rejecting the two claims in the application
upon the references of record. This petition is based upon
the following grounds, to-wit:

The holdings of the Primary Examiner and Examiners in
Chief, from which appeal has been taken, have been to the
effect that at the time of the Kane invention it was within the
skill of the art to have combined the references of record, to-
wit: Bates patent No. 946,816 and Weber patent No. 820,535,
in such a way as to anticipate the subject matter of the re-
jected claims. The Office has never contended that either of
the reference patents taken alone anticipates the claims on
appeal and the sole question involved has been one of inven-
tion. The position of the Office has been that one skilled in
541428 78

(Endorsed) Jan 29 1919

850 the art to which the Kane invention relates would natur-
ally and without the exercise of invention combine the
Bates mechanism with a prior art magneto, such as shown in
the Weber patent, to produce that which applicant claims is
his invention. The position of the applicant has been that

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one exercising the skill of the art as it existed prior to Mr. Kane's invention and following the recognized practice of the art would, if he endeavored to combine the prior art devices, place them in an arrangement not embodying the applicant's invention nor responding to the terms of applicant's claims.

Neither the Primary Examiner nor the Examiners in Chief at the time their respective actions were taken had before them anything going to show what the skill of the art would have produced in an attempt to operate a magneto in combination with the mechanism of the Bates patent. The lower tribunals, having no concrete thing before them showing, or tending to show, what could and would naturally be produced by the mere skill of the art in attempting to combine Bates with magnetos of the prior art, quite naturally jumped to the conclusion that Bates and Weber would naturally be combined to produce a structure anticipating applicant's claims and that, therefore, invention was not required to produce the combinations set forth in applicant's claims.

Within the last few days applicant's attorneys have learned that a prominent manufacturer of gasoline engines has produced and sold large numbers of engines not embodying the applicant's invention but comprising ignition systems wherein the Bates invention is employed in conjunction with a magneto in just the arrangement which we contend would naturally be provided by one skilled in the art if he should attempt to combine the devices of the art prior to Kane in one installa-

541428 79

—2—

(Endorsed) Jan 29 1919

851 tion. The accompanying affidavit of Mr. Walter Brown identifies the arrangement we have referred to and points out the reasons why one skilled in the art and not exercising invention would and did produce the arrangement employed by the manufacturer referred to and why one possessing the skill of the art but not exercising invention would not naturally combine the devices of the prior art in the arrangement called for by the claims in applicant's application.

It is respectfully submitted that the Primary Examiner should have the benefit of knowing what the skill of the art has produced along the lines of applicant's invention in deciding the difficult question as to whether or not the applicant in providing his admittedly new combination exercises invention or merely what may be regarded as the skill of the art

as it existed at the time Mr. Kane made his invention. Therefore, the applicant requests that the Honorable Commissioner hold in abeyance the appeal from the Examiners in Chief and remand this application to the Primary Examiner with instructions to reconsider and act upon this application in the light of the new matter now at hand.

Respectfully submitted,

EDMUND JOSEPH KANE,

By WILLIAMS & BRADBURY

Attorneys.

1315 Monadnock Block, Chicago, Ill.,

June 23, 1916.

541428 80

—3—

(Endorsed) Jan 29, 1919

852 (Rubber stamp) Docket Clerk Jul 12 1916 U. S.
Patent Office.

UNITED STATES PATENT OFFICE

Applicant—Edmund Joseph Kane

Invention—Electric Igniters for Explosive Engines

Serial No.—541,428

Filed February 2, 1910.

AFFIDAVIT OF WALTER BROWN.

State of Wisconsin }
County of Racine } ss:

WALTER BROWN, being first duly sworn, on oath deposes and says:

I am a citizen of the United States, a resident of Racine, Wisconsin, and the Vice-President and General Manager of the Webster Electric Company, which company has for its principal business the manufacture and sale of magnetos for internal combustion engine ignition. I am, and have been continuously for many years last past, in close touch with the trade in internal combustion engines of the type wherein make and break or low tension ignition is or may be conveniently employed. This class of engines, generally speaking, includes large and small stationary engines, farm engines, tractor engines, etc. For many years last past I have made it a point

to keep myself familiar with the construction, operation, and equipment of different makes of engines of the class mentioned as they have been placed upon the market from time to time.

I fully understand the construction and mode of operation of the mechanism disclosed in the above entitled application of Edmund Joseph Kane and have examined and understand the construction and operation of the mechanisms disclosed in the Bates and Weber patents upon which the Primary Exam-
541428 81

(Endorsed) Jan 29 1919

853 iner rejected the two claims in Mr. Kane's application.

I am informed that the Examiner rejected the claims in Mr. Kane's application not on the theory that either of these patents in and of itself anticipates what Mr. Kane claims is his invention, but rather upon the theory that it would be the natural thing for one skilled in the art of internal combustion engine ignition to place a magneto, say of the type shown in the Weber patent, in combination with the device shown in the Bates patent to produce a structure involving the subject matter of the claims in Mr. Kane's application.

The invention of the Bates patent is, in my opinion, a meritorious one and has recently been used to a considerable extent upon hit and miss engines. Bates undoubtedly contemplated using battery current in connection with his mechanism as no magneto is shown in the Bates drawing nor mentioned in his specification. At the time of the Bates invention the common practice was to utilize battery current in connection with the make and break electrodes of the type illustrated by Mr. Bates.

The Weber patent is, in my opinion, a mere paper patent as devices constructed in accordance with the Weber disclosure have never appeared upon the market to my knowledge. Although application for the Weber patent, which shows what may be called an oscillating magneto, appears to have been made in 1903 none of the Weber devices so far as I know was ever used commercially and it was not until seven or eight years later, after the Webster Electric Company had placed upon the market devices embodying the inventions disclosed in Mr. Kane's patent application that the engine trade became familiar with and began to use oscillating low tension magnetos. The shortcomings of the Weber device which undoubtedly prevented it from coming into commercial use are prob-

ably not important so far as the questions herein involved
541428 82 —2—

(Endorsed) Jan 29 1919

854 are concerned and, therefore, will not be referred to in detail by me.

I have been asked to express my opinion as to whether or not at the time Mr. Kane's application was filed, to-wit: February 2, 1910, it would have been within the skill of the art to have combined a magneto with the Bates arrangement to accomplish the object of Mr. Kane's invention which, as I understand it, is that the magneto operating means shall be rendered inoperative whenever the engine exceeds a pre-determined speed. Mr. Kane in his application shows and describes means operated by the exhaust valve actuating rod for rendering the magneto operating means inoperative during non-firing periods in the operation of a hit and miss engine.

In my opinion it required more than the mere skill of an expert in gas engine ignition to produce Mr. Kane's combination, the disclosures of the Bates and Weber patents notwithstanding. This opinion is based not only upon the fact that prior to Mr. Kane's invention no one had ever produced the combination called for by the claims in Mr. Kane's application, but upon what I consider to be of even greater importance, that is, the fact that if Mr. Kane had followed the teachings and recognized practice of the art as it existed at the time his application was filed he would not have arranged his mechanism as he did. In the art as it existed prior to Mr. Kane's invention when magnetos were used for ignition purposes the practice was to have the magneto at all times driven from the engine shaft so that the magneto operated at all speeds of the engine, there being no provision made for permitting the operation of the magneto to cease during non-firing periods in the running of the engine. The magneto of the Weber patent was and is intended to operate each time the piston in the cylinder of the associated engine reaches
541428 83 —3—

(Endorsed) Jan 29 1919

855 its firing position and there is no means shown or suggested in the Weber patent for interrupting the operation of the magneto during non-firing periods in the running of a hit and miss engine.

Inasmuch as the recognized best practice of the art as it existed prior to Mr. Kane's invention was to operate the magneto continuously and without regard to engine speed, and inasmuch as there was nothing in the art to teach otherwise, it seems logical to suppose that a person exercising the skill of the art and not resorting to invention would follow the teachings and best practice of the art and use a constantly driven magneto if he desired to use the mechanism of the Bates patent in combination with a magneto. This conclusion is supported by the fact that a leading manufacturer of high grade stationary engines working independently of Mr. Kane, and, so far as I know, in ignorance of Mr. Kane's activities has produced and placed upon the market stationary engines embodying the Bates arrangement in combination with a magneto—a magneto at all times operatively connected with the engine and arranged to operate regardless of whether or not the igniter electrodes are operating. In other words, this engine manufacturer has followed the teachings of the art as it existed prior to Mr. Kane's invention and, therefore, instead of producing Mr. Kane's combination wherein both the igniter electrodes and the magneto are put out of commission when the engine overspeeds this manufacturer has provided an arrangement wherein the igniter electrodes only are temporarily put out of commission when the engine overspeeds, the magneto being kept running regardless of the speed of the engine and regardless of whether or not the igniter electrodes are in or out of commission.

The engine manufacturer to which I have referred is
541428 84 —4—

(Endorsed) Jan 29 1919

856 the Termaat & Monahan Company of Oshkosh, Wisconsin, Attached hereto and marked "T. & M. Catalogue—Brown Affidavit" is a catalogue which was distributed to the trade by the Termaat & Monahan Company some years ago and which illustrates the type of engine to which I have referred and which have been placed upon the market in considerable numbers by the Termaat & Monahan Company. Although this catalogue contains some thirty-two pages, on a good many of which are illustrated different styles of hit and miss engines embodying the arrangement to which I have referred, I shall refer particularly to the engines illustrated on pages eight, nine, and ten of the catalogue. I have applied the same

reference numerals to corresponding parts of the engines shown on pages eight, nine, and ten. On pages eight, nine, and ten A indicates the make and break electrodes which are cyclically operated, as in the Bates patent, by a reciprocating rod B. At C is the operating rod for the engine exhaust valve which is normally cyclically operated by a cam D to effect the proper actuation of the exhaust valve, but which is connected with governor mechanism so that the exhaust valve is held open when the engine overspeeds. At E is a collar on the exhaust valve operating rod which co-operates with a rocker or bell crank arm F co-operating with the igniter operating rod B to prevent actuation of the make and break electrodes whenever the exhaust valve is held open. The parts thus far described are not essentially different from the mechanism disclosed in the Bates patent and operate in the same manner to secure the same result. Operating with the cam D, which effects the operation of the exhaust valve operating rod C, is a spur gear G permanently geared to the engine crank shaft and through which movement is transmitted to a pinion H fixed upon the shaft of a magneto I. It will thus be seen that the magneto I is permanently geared

541428 85

—5—

(Endorsed) Jan 29 1919

857 to the engine crank shaft and is continuously operated whenever the engine is running and regardless of whether or not the governor devices are operating to hold the exhaust valve in open position, and regardless of whether or not the rocker or bell crank arm F is in such position as to prevent the reciprocating rod B from effecting the operation of the make and break electrodes A.

I believe that the arrangement illustrated in the Termaat & Monahan Company's catalogue, and which I have just briefly described, is what might reasonably be expected if one skilled in the art of internal combustion engine ignition as it existed at the time of the Kane invention were given the Bates patent and told to combine with it any magneto of the prior art, it being borne in mind that the prior art magnetos, the Weber device included, were provided with no means for

temporarily putting them out of commission during the non-firing periods in the operation of a hit and miss engine.

And further affiant sayeth not.

WALTER BROWN

Subscribed and sworn to before me this 23rd day of June,
A. D. 1916.

JAMES N. BOUR,
Notary Public.

My commission expires March 23, 1919
541428 86

T & M. Catalog. Shown App. 105



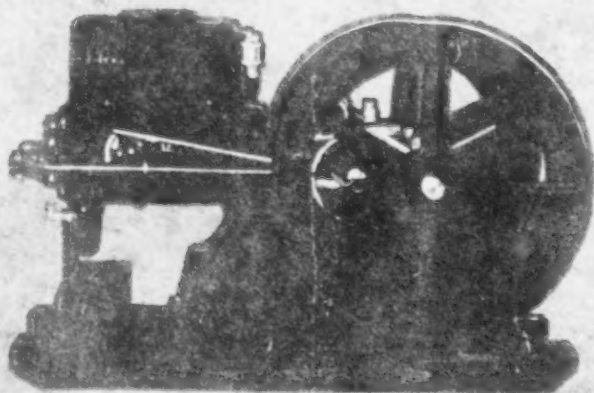
STATIONARY ENGINES

DOCKET CLERK

JUL 12 1916

U. S. PATENT OFFICE

T & M QUALITY



CATALOG No 21

TERMAAT & MONAHAN CO.
BRANSON, MO. U.S.A.



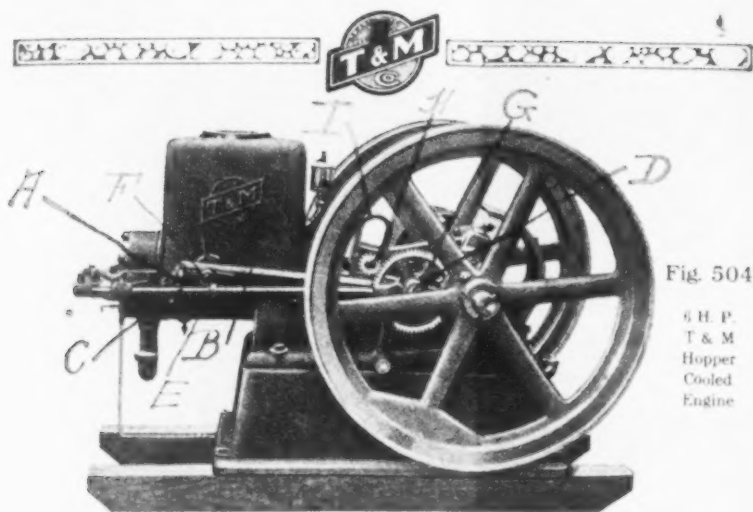


Fig. 504

6 H. P.
T & M
Hopper
Cooled
Engine

Specifications

Cylinder: Cast with upper part of base.
Speed: 325 revolutions per minute normal.
Net weight: 1200 lbs. Gross weight packed for Export: 1500 lbs.
Cubic measurement packed for Export: 60 cubic feet.
Flywheel: 32 inches diameter.
Weight of each flywheel: 210 lbs.
Crank shaft: 2 inches diameter.
Bearings: Best grade copper hardened babbitt.
Piston: 4 snap rings and oil grooves.
Connecting rod: Steel, babbitted and bushed.
Ignition: Make and break, adjustable.
Gears: All machine cut.
Governor: Hit and miss type, adjustable.
Floor space: 36x58 inches. Height: 36 inches.
Pulley: 12x10 inches.
Fuel Tank capacity: 8 gallons. Hopper capacity: 8 gallons.
Color: T & M green.
Equipment: Includes muffler, fuel tank, batteries, coil, switch, skids, spark plug, oil and grease cups, wrenches, oil can, and complete instructions for operating.

Parts not Included, but Supplied Extra when Ordered

Friction clutch, gasoline reservoir, magneto, kerosene and gas attachment, compression plates for different altitudes. FOR PRICES SEE PRICE LIST.

Termaast & Monahan Co.

Philadelphia, March 17, 1913.

Gentlemen:—Received engine purchased of your agent, and would say it is a great engine. You can't beat it.

Yours truly, H. HARFMAN.

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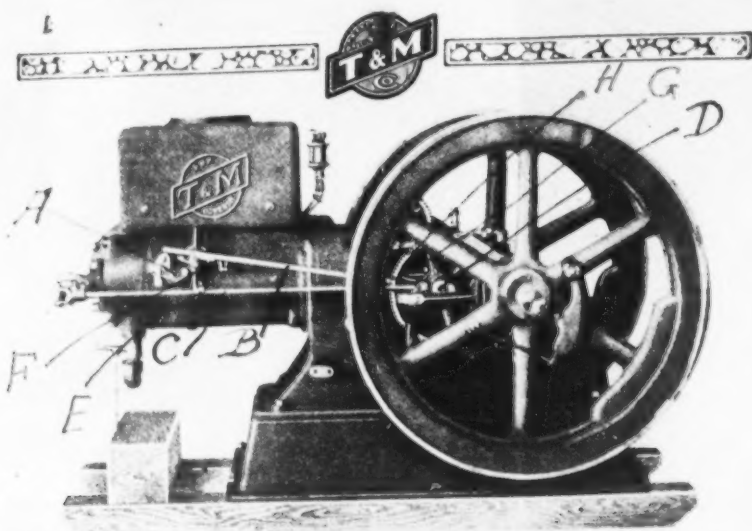


Fig. 505 9 H. P. T & M Hopper Cooled Engine

Specifications

Cylinder: Cast separate from base.
 Speed: 275 revolutions per minute normal.
 Net weight: 2000 lbs. Gross weight packed for Export: 2400 lbs.
 Cubic measurement packed for Export: 90 cubic feet.
 Flywheel: 37 inches diameter.
 Weight of each flywheel: 335 lbs.
 Crank shaft: 2 $\frac{1}{2}$ inches diameter.
 Bearings: Best grade copper hardened babbitt.
 Piston: 4 snap rings and oil grooves.
 Connecting rod: Steel, brass end and bushed.
 Ignition: Make and break, adjustable.
 Gears: All machine cut. Governor: Hit and miss, adjustable.
 Floor space: 40x68 inches. Height: 45 inches.
 Pulley: 16x10 inches, straight face.
 Fuel Tank capacity: 11 gallons. Hopper capacity: 14 gallons.
 Color: T & M green.
 Equipment: Includes muffler, fuel tank, batteries, coil, switch, skids, spark plug, oil and grease cups, wrenches, oil can and complete instructions for operating.

Parts not Included, but Supplied Extra when Ordered

Friction clutch, magnets, kerosene and gas attachment, compression plates for different altitudes, and fuel pump. FOR PRICES SEE PRICE LIST.

You will perhaps recall me to memory when referred to the sale of one of the T & M engines, which you sold to my father, M. C. Hansen, some time ago. I assure you that you have given us a perfectly satisfactory engine, and the interest that you have shown after the sale as well as before, has made of my father a staunch supporter of the T & M engines.

Very respectfully, ALFRED C. HANSEN, Florence, Nebr.



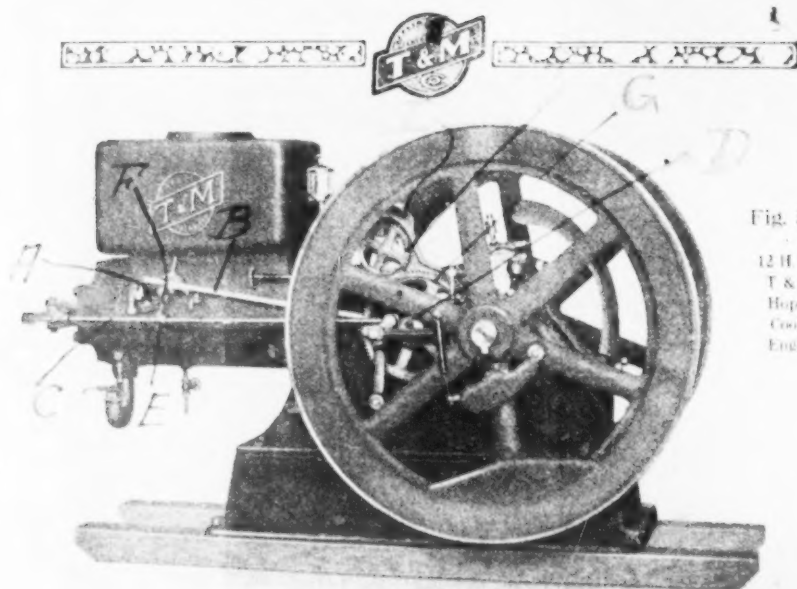


Fig. 506

12 H. P.
T & M
Hopper
Cooled
Engine

Specifications

Cylinder: Cast separate from base.
Speed: 260 revolutions per minute.
Net weight: 2400 lbs. Gross weight packed for Export: 3000 lbs.
Cubic measurement packed for Export: 110 cubic feet.
Flywheel: 40 inches diameter.
Weight of each flywheel: 430 lbs.
Crank shaft: 2 1/2 inches diameter.
Bearing: Best copper hardened babbitt.
Piston: 4 snap rings and oil grooves.
Connecting rod: Steel, brass end and bushed.
Ignition: Make and break, adjustable.
Gears: All machine cut. Governor: Hit and miss, adjustable.
Floor space: 42x72 inches. Height: 48 inches.
Pulley: 18x10 inches, straight face.
Fuel Tank capacity: 15 gallons. Hopper capacity: 16 gallons.
Equipment: Includes muffler, fuel tank, batteries, coil, switch, skids, spark plug, oil and grease cups, wrenches, oil can and complete instructions for operating.

Parts not Included, but Supplied Extra when Ordered

Friction clutch, magneto, kerosene or illuminating gas attachment, compression plates for different altitudes, and fuel pump. FOR PRICES SEE PRICE LIST.

862

2—603

Letter No. 28

Address only
The Commissioner of Patents
Washington, D. C.

EEG

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

July 13, 1916.

In the matter of the
Application of
Edmund Joseph Kane,
Electric Igniters for
Explosive Engines;
Filed Feb. 2, 1910,
Serial No. 541,428.

} On Appeal to the Commissioner
(Petition to remand to the
Examiner.)

Sir:

You are hereby informed that the above petition has been
approved by the Commissioner.

By direction of the Commissioner:

Very respectfully,

W. F. WOOLARD
Chief Clerk.
J.

Edmund Joseph Kane,
c/o Williams & Bradbury
720 Monadnock Block
Chicago, Ill.

541428 122

(Endorsed) Jan 29 1919

863 Div. 28 Room 63

2-260

Paper No. 29

21

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name. All communications respecting this application should give the serial number, date of filing, title of invention, and name of the applicant.

RYH

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

July 17, 1916.

(Rubber Stamp) U. S. Patent Office July 17 1916 Mailed.
Williams & Bradbury,
720 Monadnock Block,
Chicago, Ill.

Please find below a communication from the Examiner in charge of the application of Edmund Joseph Kane, S. No. 541,428, filed Feb. 2, 1910, Electric Igniters for Explosive Engines.

THOMAS EWING
Commissioner of Patent.

Since the applicant's position has been approved by the Commissioner, this application is taken up for reconsideration by the examiner.

Applicant's remarks in his petition and Brown's affidavit have been given due consideration, but the examiner is still of the opinion that the claims are not patentable.

The position of the office is not, as inferred from applicant's remarks, that everyone who wished to use a governor controlled igniter would combine the Bates and Weber devices in the same manner that applicant has done, but the examiner's position is that the Bates and Weber devices may be combined in the manner defined by the claims without invention. When the Weber and Bates devices are combined in the manner defined by the rejected claims, no new combination, result or effect is produced. The combination is still the same as in the Bates patent, differing therefrom only in that the well known ignition means of Weber has been

substituted for the well known means of Bates, and all the parts continue to perform their usual functions and no more.

The Brown affidavit and accompanying exhibit merely show that the Termaat & Monahan Company has developed a

541428 123

(Endorsed) Jan 29 1919

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22

(Kane, 541,482).
device different from applicant's. They in no way relate to the patentability of applicant's device or show that what applicant has done involves invention. Brown appears to have arrived at the conclusion that applicant's device is patentable because the T. & M. Co. device is different therefrom and hence not patentable itself. It seems just as reasonable to conclude that the T. & M. Co. device is patentable because applicant's device differs therefrom, and hence that applicant's device is not patentable. However, it is not seen that there is any relation between the T. & M. Co. device and the patentability of applicant's claims.

The claims are again rejected on the Bates patent, modified in view of the Weber patent, for the reasons stated in the office action of April 22, 1913 and the examiner's statement of Feb. 27, 1915.

BENSON
Examiner.

HJS

541428 124

(Endorsed) Jan 29 1919

(Rubber Stamps) Mail Room Jul 16 1916 U. S. Patent
Office. U. S. Patent Office, Jul 21 1916 Division XXVIII.

UNITED STATES PATENT OFFICE

Applicant—Edmund Joseph Kane
Invention—Electric Igniters for
Explosive Engines
Serial No.—541,428

Case 1.
Room 63
Div. 28
Filed February 2, 1910.

1315 Monadnock Block,
Chicago, Ill., July 18, 1916.

(Written in left-hand margin and canceled) Not entered.
Hon. Commissioner of Patents,
Washington, D. C.

Sir:

In the matter of the above entitled application and pursuant to the Commissioner's decision of July 13th on applicant's petition to remand this application to the Primary Examiner, applicant amends as follows:

Cancel the two claims now in the application and substitute the following claims therefor:

G¹ 3 * (1.) In combination with an internal combustion engine, a speed governor associated with the engine and operatively connected therewith, ignition mechanism for said engine comprising make and break spark electrodes and a magneto, means operated by the engine for effecting the operation of both the magneto and spark electrodes in timed relation one to the other, and mechanism controlled by said speed governor for rendering said engine operated means incapable of effecting the operation of the magneto and spark electrodes whenever the engine passes or exceeds a certain predetermined speed.

541428

125

(Endorsed) Jan 29 1919

| 4 * (2.) An internal combustion engine of the hit and

*Matter in italics in parentheses, stricken out in original transcript.

miss type having an exhaust valve, an exhaust valve operating rod and a speed governor in operative relation to said exhaust valve operating rod arranged to shift the latter to hold the exhaust valve in open position whenever the engine exceeds a certain predetermined speed, in combination with an igniter comprising make and break electrodes, a magneto for supplying ignition current to said igniter, a reciprocating push rod driven by the engine for effecting actuation of the magneto and igniter electrodes together with means operated by the exhaust valve operating rod for rendering the reciprocating push rod incapable of actuating the magneto and igniter electrodes whenever, when the engine exceeds a certain predetermined speed, the exhaust valve operating rod and the governor co-operate to hold the exhaust valve in open position, as aforesaid.

5 *(3.) In combination with an internal combustion engine, a speed governor driven from the engine, ignition mechanism for said engine comprising an igniter and a magneto for supplying ignition current to said igniter, actuating mechanism driven by the engine for effecting the operation of the magneto, and devices controlled by the speed governor for rendering said actuating mechanism incapable of effecting the operation of the magneto whenever the engine passes or exceeds a certain predetermined speed.

(Sigs.)

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Note:

His Honor, Commissioner Ewing, has remanded this application to the Primary Examiner for reconsideration in view of certain developments in the art which have not been

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126

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(Endorsed) Jan 29 1919

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considered by the Primary Examiner heretofore and which, it would seem, controvert the proposition that applicant's invention is but an obvious combination of the Bates and Weber patents of record. The affidavit of Mr. Walter

*Matter in italics in parentheses, stricken out in original transcript.

Brown sets forth facts which we urge clearly indicate that applicant's particular combination—the combination of the claims—would not naturally be produced by one skilled in the art even though he be fully cognizant of the teachings of the Bates and Weber patents. Mr. Brown's affidavit does go to show that when confronted with the same proposition that this applicant faced when he made his invention, to-wit: the use of a magneto with what we may call the "Bates arrangement" a prominent engine manufacturer, following the teachings and best practices of the art, produced a combination not embodying that which this applicant claims as his invention.

As we shall presently point out in more detail, there are at present in commercial use two forms of apparatus wherein a magneto has been used in the "Bates arrangement." One of these forms of apparatus is that of the manufacturer to whom we have referred, and the other is the apparatus invented by this applicant. We believe that on reconsideration the Examiner will come to the conclusion that of the two forms of apparatus wherein the magneto is utilized in the "Bates arrangement" one skilled in the art and following the best practices of the art would naturally adopt an apparatus similar to that of the engine manufacturer referred to. In other words, it is our position that the particular arrangement which we are claiming for this applicant is one which would not naturally be produced by one skilled in the art because the best practice of the art would naturally lead to the production of an arrangement such as that produced by

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(Endorsed) Jan 29 1919

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the engine manufacturer referred to—an arrangement not embodying applicant's particular combination and not affording the particular advantages which are afforded by applicant's particular combination alone.

The foregoing claims have been substituted for those previously in the application because we believe that they more clearly recite the structure and combination of parts which was new with this applicant and which are responsible for the marked success with which applicant's arrangement has met commercially.

Briefly, the Bates patent discloses a hit and miss engine

of the type wherein a speed governor operates through an exhaust valve rod to hold the exhaust valve open and thus to prevent an explosion within the engine cylinder whenever the engine exceeds a predetermined speed. Bates shows make and break electrodes for use with battery current and for operating the movable electrode he provides a reciprocating push rod, generally similar to that employed by this applicant. The reciprocating push rod which operates the movable electrode rides on a roller carried by a rocker or lever and the exhaust valve operating rod is provided with a pin or abutment arranged to engage the rocker or lever and shift the reciprocating rod to such a position that it does not operate the movable electrode, when, during overspeeding, the exhaust valve is being held open by the engine governor. Thus, Bates renders the spark electrodes inoperative when the engine is missing. Bates makes no mention of a magneto and his arrangement was clearly intended to be used with battery current alone. We are free to admit that the Bates patent discloses an operative and meritorious invention and one which has recently gone into wide commercial use, as pointed out in Mr. Walter Brown's affidavit. It 541428

128

—4—

(Endorsed) Jan 29 1919

869

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is our position, however, that this applicant has exercised invention by placing a magneto in the Bates arrangement in a particular manner whereby this applicant has secured a new and highly desirable result certainly not contemplated by Bates, as he discloses no magneto, and a result which has never been attained before when a magneto was used.

The Weber patent discloses an oscillating magneto with which is associated make and break electrodes. Weber also discloses a reciprocating rod for effecting the operation of the oscillating magneto and the magneto is designed to separate the spark electrodes to create a spark when the magneto is operated. It is of interest to note, as is pointed out by Mr. Brown in his affidavit, that although the application for the Weber patent was filed in 1903 and the patent issued in 1906 oscillating magnetos never came into commercial use until they were perfected and placed upon the market by the Webster Electric Company, Mr. Kane's assignee. The

Weber patent is, therefore, undoubtedly nothing but a paper patent, but, be that as it may, the important thing to be borne in mind is the fact that the Weber device was intended to be continuously operating in the sense that the magneto is actuated every time the piston in the associated engine reaches the end of its compression stroke. The Weber patent makes no provision for cutting out the magneto during overspeeding or non-firing periods of engine operation.

We believe the Examiner will be free to admit that neither Bates nor Weber taken alone anticipates applicant's claims. It is clear that the Weber patent discloses nothing for

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541428 129

(Endorsed) Jan 29 1919

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rendering the magneto inoperative during overspeeding or non-firing periods of engine operation. Moreover, we know of no patent which discloses any arrangement wherein a magneto is cut out of operation during overspeeding or non-firing periods of engine operation. We assume that there is no such patent because none has been cited by the Examiner and certainly when magnetos were used the recognized practice in the art as it existed at the time of applicant's invention was to drive the magneto from the engine so that the magneto operated to generate a current each time the piston in the engine cylinder reached the end of its compression stroke. It is true that at the time of applicant's invention rotary magnetos only were in general commercial use. Weber, although his magneto was an oscillator as distinguished from a rotating magneto, had no idea that his magneto might or should be cut out of operation during non-firing or overspeeding periods of engine operation.

Regardless of whether or not the Weber patent was known in the art prior to the date of applicant's invention, it seems to us that any one skilled in the art desiring to place a magneto in the "Bates arrangement" would naturally adopt a continuously operating magneto, or, in other words, a magneto which operated to produce an impulse for every time the piston in the engine cylinder reached the end of its compression stroke. We say one skilled in the art would do this because that is the only kind of magneto that was known in the art prior to the date of applicant's invention. All the rotary magnetos of the prior art are admittedly continuously

operating and the magneto of the Weber patent is continuously operating in the sense that it is operated to generate a current each time the piston in the cylinder of the associated engine reaches the end of its compression stroke.

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541428 130

(Endorsed) Jan 29 1919

871

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We believe that our contention that one skilled in the art in attempting to place a magneto in the "Bates arrangement" would adopt a continuously operating magneto is borne out by the fact that the Termaat & Monahan Company, of Oshkosh, Wisconsin, a large manufacturer of gas engines, has adopted such an arrangement, as is fully pointed out in the affidavit of Mr. Walter Brown and as is illustrated in the Termaat & Monahan catalogue which forms a part of the Brown affidavit. The Termaat & Monahan Company we urge did just what might be expected from one skilled in the art. They adapted a continuously operating magneto to the Bates arrangement and therefore attained the object of the Bates invention, but did not attain the object of applicant's invention.

We respectfully submit that this applicant, when he placed a magneto in the Bates arrangement in such a way that the magneto, as well as the make and break electrodes, is automatically cut out of operation during nonfiring or overspeeding periods of engine operation, departed from the teachings and recognized practice of the art and exercised invention. Had this applicant gone no further than have Termaat & Monahan there might be a serious question as to whether or not he had exercised invention because in the Termaat & Monahan arrangement it is only the wear and tear on the electrodes that is obviated during overspeeding periods and the magneto goes right on operating regardless of whether or not the exhaust valve is open. This applicant, by a new combination, has placed a magneto in the "Bates arrangement" in such a way that when overspeeding occurs the wear and tear on the magneto, as well as wear and tear on the electrodes, is eliminated. We submit that this result is highly

—7—

541428 131

(Endorsed) Filed Jan 29, 1919

872

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desirable and that, therefore, applicant's combination possessed great utility. We also urge that in providing a magneto that is cut out of operation during overspeeding this applicant exercised invention because had he followed the practice of the art and done that which one skilled in the art would naturally do he would have used a continuously operating magneto, the only kind known in the art prior to his invention, and thus would have arrived at some combination analogous to that of Termaat & Monahan rather than a combination such as is called for by the claims in this application.

As we have pointed out the magneto of Weber is continuously operating and all of the magnetos of the prior art were continuously operating. Therefore, it is logical to assume that Bates or any one else prior to this applicant desiring to use a magneto in the "Bates arrangement" would have employed a continuously operating magneto. If the Bates and Weber patents should be combined in an arrangement such as suggested by the Examiner, the several parts would perform a function not contemplated by either Bates or Weber, to-wit; the cutting out of the magneto during missing or non-firing periods of engine operation. It is believed that applicant's conception of mechanism cutting out the magneto as well as the igniter should be covered by patent claims.

We believe the foregoing claims clearly and distinctly bring out the several features which distinguish applicant's invention from Bates and Weber and everything else in the prior art as well.

Favorable consideration of the application as now submitted is respectfully urged.

EDMUND JOSEPH KANE,
By WILLIAMS & BRADBURY,
Attorneys.

541428 132

(Endorsed) Jan 29 1919

873

2—224

Div. 28 Room 63

Paper No. 31

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

All communications respecting this application should give the serial number, date of filing, title of invention, and name of the applicant.

RYH

8

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

July 21, 1916.

Williams & Bradbury,
720 Monadnock Block,
Chicago, Ill.

(Rubber stamp) U. S. Patent Office Jul 21 1916 Mailed.

Please find below a communication from the Examiner in charge of the application of Edmund Joseph Kane, S. No. 541,428, filed Feb. 2, 1910, Electric Igniters for Explosive Engines.

THOMAS EWING

C16—2631.

Commissioner of Patents.

The amendment of July 20, 1916, directing the cancellation of the rejected claims and presenting new claims has not been entered.

This application was remanded to the Examiner by the Commissioner for reconsideration of the application and claims in view of Brown's affidavit, but for no other purpose. The case is not open for further prosecution before the Examiner. See Rule 140.

Since this case has been reconsidered by the Examiner to the extent for which it has been remanded, it cannot be further considered by him or prosecuted before him except by express order of the Commissioner.

BENSON.
Examiner.

HJS
541428 133

(Endorsed) Jan 29 1919

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Address Only
The Commissioner of Patents,
Washington, D. C.

Paper No. 32

DEPARTMENT OF THE INTERIOR
United States Patent Office
Washington

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Sir:

August 24, 1916.

The case of Edmund J. Kane }
Electric Igniters for Explosive } Appeal to
Engines } Commissioner.

Serial

*(*Intf.*) No. 541,128, will be heard by the * (*Examiners in Chief*)
on the 12th day of September, 1916.

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The hearings will commence at *(*one*) o'clock, and as soon
as the argument in one case is concluded the succeeding case
will be taken up.

If any party, or his attorney, shall not appear when the
case is called, his right to an oral hearing will be regarded as
waived.

The time allowed for arguments is as follows:

Ex parte cases, thirty minutes;

Motions, thirty minutes, each side;

Interference appeals, final hearing, one hour each side.

By special leave, obtained before the argument is com-
menced, the time may be extended.

The appellant shall have the right to open and conclude in
interference cases, and in such case a full and fair opening
must be made.

Briefs in interference appeals must be filed in accordance
with the provisions of Rule 147.

Respectfully,

To Williams & Bradbury
720 Monadnock Block,
Chicago, Ill.

THOMAS EWING
Commissioner of Patents.

541428 134

(Endorsed) Jan 29 1919

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*Matter in italics in parentheses, stricken out in original transcript.

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(Rubber stamp) Docket Clerk Sep 15 1916 U. S.
Patent Office.

UNITED STATES PATENT OFFICE

Applicant—Edmund Joseph Kane

Case 1.

Invention—Electric Igniters for Explosive Engines

Serial No.—541,428

Filed February 2, 1910.

BRIEF ON APPEAL

TO THE HONORABLE COMMISSIONER OF PATENTS

Statement

This application comes before your Honor on an appeal from a decision of the Board of Examiners in Chief affirming the action of the Primary Examiner finally rejecting the claims in this application upon two patents of the prior art, namely, Bates patent No. 946,816, and Weber patent No. 820,535. Prior to the date originally set for this hearing before your Honor the applicant presented an affidavit of one Walter Brown, setting forth facts in the nature of newly discovered evidence, and at the same time petitioned your Honor to remand this application to the Primary Examiner for reconsideration in view of the facts set forth in the affidavit of the aforesaid Walter Brown. That petition was granted by your Honor on July 13, 1916. Shortly thereafter, to wit, on July 17, 1916, the Primary Examiner acted upon the application as remanded and abided by his former action finally rejecting the application. This action of July 17, 1916, was crossed in the mails by a written amendment and argument forwarded by applicant's attorneys on July 18, 1916. By our communi-
541428 135

(Endorsed) Jan 29 1919

876 cation of July 18, 1916, (filed July 20, 1916) we sought to substitute three new claims for those previously in the application, and at considerable length discussed the Brown affidavit and its bearing upon the questions involved in this case. The Primary Examiner by an action dated July 21, 1916, refused to admit our amendment of July 18, 1916. This application now comes before your Honor on the regular appeal from the decision of the Board of Examiners in Chief.

Although the three claims included in our amendment of July 18, 1916, were not admitted by the Primary Examiner, we assume that your Honor in the exercise of your supervisory authority can and will direct the entry of said claims if the facts presented convince your Honor that the subject matter of this appeal is patentable and that the three new claims better present that patentable subject matter than do the claims under final rejection.

The Subject Matter

The subject matter of the appealed claims is an electric igniter for explosive engines. The applicant's application discloses an internal combustion engine of the hit and miss type wherein during overspeeding, or otherwise stated, during non-firing periods, a speed governor acting through the agency of the exhaust valve rod acts to hold the exhaust valve in open position and thus for a period prevents the normal intake, compression and ignition of combustible gases within

541428 136

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(Endorsed) Jan 29 1919

877 the engine cylinder. The ignition mechanism per se consists of an oscillating magneto and a pair of make and break electrodes so connected and related to the magneto that the electrodes are separated in timed relation to the operation of the magneto to permit an ignition spark to pass at the proper instant in the cycle of engine operation. The proper recurring oscillations of the magneto rotor are accomplished by a push rod driven from the engine crank shaft. The primary object of the applicant's invention is to eliminate the operation of both the magneto and the spark electrodes during missing or overspeeding periods in the operation of the engine, without, however, rendering both or either of these parts incapable of performing their respective functions whenever it is proper and necessary that a spark should pass within the engine cylinder. A hit and miss engine, particularly when it is running under a light load, is apt to miss very frequently. In the prior art whenever a magneto, whether it be of the oscillating or rotary type, was used in connection with such engine it was necessary in order that the magneto might function properly during hitting or firing periods to have the magneto operate during missing or non-firing periods as well. Thus, under the practice of the prior art, the

wear and tear on the magneto was the same during missing periods as during hitting periods, although under the first condition the magneto performed no useful function, its operation being a mere waste of energy and the cause of needless wear on the operating parts of the mechanism.

541428 137

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(Endorsed) Jan 29 1919

878 This applicant provided means cooperating with the speed governor and the exhaust valve rod arranged to lift the magneto push rod out of driving relation with the magneto during missing or non-firing periods, thus preventing the operation of the magneto during missing periods, the several parts cooperating and functioning to permit the push rod to engage and operate the magneto in the usual manner during hitting or firing periods. It was not until after the applicant had made his invention that engine manufacturers came to learn that it was possible to eliminate the operation of the magneto during overspeeding or non-firing periods and at the same time have the magneto always in readiness properly to perform its function when the engine ceased to overspeed. The Kane invention has gone into wide commercial use as is evidenced by the affidavits of Edmund Joseph Kane and Maurice Kane of record in the application, the said affidavits having been filed along with applicant's brief before the Honorable Board of Examiners in Chief.

The Prior Art

Bates Patent:

Briefly, the Bates patent (No. 946,816) discloses an engine of the type wherein a speed governor operates through an exhaust valve rod to hold the exhaust valve open and thus to prevent an explosion within the engine cylinder whenever the engine exceeds a certain predetermined speed. Bates

541428 138

—4—

(Endorsed) Jan 29 1919

879 shows make and break electrodes for use with battery current and for operating the movable electrode he provides a reciprocating push rod, generally similar to that employed by this applicant. The reciprocating push rod which operates the movable electrode rides on a roller carried by a rocker or lever and the exhaust valve operating rod is provided with a pin or abutment arranged to engage the rocker

or lever and shift the reciprocating rod to such a position that it does not operate the movable electrode, when, during overspeeding, the exhaust valve is being held open by the engine governor. Thus, Bates renders the spark electrodes inoperative when the engine is missing. Bates makes no mention of a magneto and his arrangement was clearly intended to be used with battery current alone. We are free to admit that the Bates patent discloses an operative and meritorious invention and one which has recently gone into commercial use, as pointed out in Mr. Walter Brown's affidavit. It is our position, however, that this applicant has exercised invention by placing a magneto in the Bates arrangement in a particular manner whereby this applicant has secured a new and highly desirable result certainly not contemplated by Bates, as he discloses no magneto, and a result which has never been attained before when a magneto was used.

Weber Patent:

The Weber patent (No. 820,535) discloses an oscillating magneto with which is associated make and break electrodes. Weber also discloses a reciprocating rod for effecting the

541428 139

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(Endorsed) Jan 29 1919

880 operation of the oscillating magneto and the magneto is designed to separate the spark electrodes to create a spark when the magneto is operated. It is of interest to note, as is pointed out by Mr. Brown in his affidavit, that although the application for the Weber patent was filed in 1903 and the patent issued in 1906 oscillating magnetos never came into commercial use until they were perfected and placed upon the market by the Webster Electric Company, Mr. Kane's assignee. The Weber patent is, therefore, undoubtedly nothing but a paper patent, but, be that as it may, the important thing to be borne in mind is the fact that the Weber device was intended to be continuously operating in the sense that the magneto is actuated every time the piston in the associated engine reaches the end of its compression stroke. The Weber patent makes no provision for cutting out the magneto during overspeeding or non-firing periods of engine operation.

Continuously Operating Magnetos Generally

Prior to this applicant's invention it was old to use magnetos for ignition purposes in connection with various types of internal combustion engines. Such magnetos were of the

rotary armature type, were permanently geared with the engine crank shaft and therefore operated continuously during the operation of the engine regardless of whether or not the latter was overspeeding. As set forth in the affidavit of Mr. Walter Brown, prior to the invention of this applicant oscillating magnetos were practically unknown commercially, it being the well known rotary magnetos that were in commercial use. Therefore, in deciding whether this applicant exercised invention in the production of the subject matter of this application it is of interest to note what would have been done by one skilled in the art had he endeavored to incorporate the teachings of Bates in a magneto arrangement of the kind commercially known before applicant's invention. This phase of the matter will be discussed in connection with the Termaat & Monahan device mentioned in the affidavit of Mr. Walter Brown.

541428 140

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881 cial use. Therefore, in deciding whether this applicant exercised invention in the production of the subject matter of this application it is of interest to note what would have been done by one skilled in the art had he endeavored to incorporate the teachings of Bates in a magneto arrangement of the kind commercially known before applicant's invention. This phase of the matter will be discussed in connection with the Termaat & Monahan device mentioned in the affidavit of Mr. Walter Brown.

The Weber Magneto as well as all of the Prior Art Magnetos are Continuously Operating.

The rotary magnetos of the prior art were, of course, continuously operating because they were permanently geared to the engine crank shaft and continued to operate during the operation of the engine regardless of the speed at which the engine operated. Although the Weber device is of the oscillating type rather than of the rotary type it is continuously operating, in the sense of the words as here used, to just the same extent as are the rotary magnetos of the prior art. An oscillating magneto is moved, tripped and oscillated at a certain point in the cycle of the operation of its associated engine. The oscillating magneto of the Weber patent operates once during every cycle of its associated engine regardless of the speed of that engine and is therefore continuously operating in the same sense as are the rotary magnetos and is distinguished in the same sense from applicant's magneto. The applicant's magneto is put out of commission

541428 141

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(Endorsed) Jan 29 1919

882 during overspeeding or non-firing periods in the operation of the engine, but this is not true of the Weber device.

It, therefore, appears that in the prior art there is no ignition apparatus comprising a magneto wherein the magneto is put out of commission during missing or non-firing periods. This is of the essence of applicant's invention and we believe the conception on the part of this applicant of the possibility of putting the magneto out of commission during non-firing or missing periods, the desirability of so doing, and the provision of apparatus for accomplishing the same clearly entitles him to a patent for that which he has produced.

The Termaat & Monahan Device

The ignition mechanisms disclosed in the Termaat & Monahan catalog, identified in the affidavit of Mr. Walter Brown, exemplify what we believe one skilled in the art as it existed prior to applicant's invention would have done even had he perceived that it was desirable to incorporate a magneto in an arrangement similar to that of the Bates patent relied upon by the Primary Examiner. The position of the Primary Examiner is that the Bates and Weber devices may be combined in the manner defined by the claims without invention. Termaat & Monahan have combined the Bates arrangement with a continuously operating magneto of the prior art and have not attained the end which characterizes applicant's invention. It should be kept in mind that prior to the date of applicant's invention the art knew of nothing but continuously

541428 142

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(Endorsed) Jan 29 1919

883 operating magnetos, Weber, as we have pointed out, being continuously operating as were the well known rotary magnetos. It therefore seems logical to assume that had anyone skilled in the art desired to place a magneto in the Bates arrangement he would have operated the magneto continuously and have cut out only the spark electrodes during non-firing periods as does Bates. This is precisely what Termaat & Monahan have done. Their magneto is continuously operative and is driven during non-firing or missing periods as well as during firing periods. During missing or non-firing periods the spark electrodes of Termaat & Monahan are put out of commission. An important thing to remember in connection with applicant's invention is the fact that prior to his invention no one had conceived of the desirability or possibility of eliminating the operation of the magneto dur-

ing non-firing or missing periods. This being the case, we submit it must be assumed that had anyone desired to place a magneto in the Bates arrangement he would have adopted a continuously operating magneto.

The Applicant's invention

For the sake of argument we are willing to admit that one skilled in the art and having a knowledge of the Bates patent might perhaps have arrived at a combination similar to the applicant's had he perceived the desirability and possibility of producing such a combination, but the record shows that prior to this applicant's invention no one had ever perceived

541428 134

—9—

(Endorsed) Jan 29 1919

884 the desirability and possibility of such a combination, and we submit that in view of the wide commercial use which applicant's invention has been given the combination in issue is of great merit and one which would certainly have gone into wide commercial use prior to applicant's invention had anyone of the many engineers engaged in this active art perceived the desirability and possibility of the result which characterizes applicant's combination or conceived of the mechanism for attaining that result.

The applicant is in no way precluded from securing a patent covering his combination simply because the more important part of the work involved in the production of his invention resided in the act of discerning the desirability and possibility of eliminating the operation of the magneto during non-firing or missing periods and at the same time always having the magneto ready to function properly when it is necessary that a spark pass within the combustion cylinder of the exhaust engine. We submit that the question as to whether Kane has given to the public a novel and valuable invention should be determined by applying the test laid down by the United States Circuit Court of Appeals for the Seventh Circuit in the case of the General Electric Company vs. Sangamo Electric Company, (174 Fed. Rep. page 251). The language of the court in that case is as follows:

"Invention, in the nature of improvement, is the double mental act of discerning, in existing machines or proc-

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esses or articles, some deficiency and pointing out the means of overcoming it."

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(Endorsed) Jan 29 1919

885 We submit that the applicant Kane performed the double act referred to by the court in the opinion above quoted. He realized that it was undesirable to operate a magneto during non-firing or missing periods as well as during firing or hitting periods of engine operations, he realized that it was possible to eliminate the operation of the magneto during non-firing periods and at the same time have the magneto in condition always properly to function during hitting or firing periods, he moreover provided mechanism whereby this end was attained for the first time.

The mere simplicity of the mechanism whereby applicant attains the novel result characteristic of his invention should not in any way preclude him from patent protection, for, as the Supreme Court of the United States says in the case of *Potts vs. Creager*, (105 U. S. 608):

"The apparent simplicity of a new device often leads an inexperienced person to think that it would have occurred to anyone familiar with the subject. But the decisive answer is that with dozens and perhaps hundreds of others laboring in the same field, it had never occurred to anyone before. The practiced eye of an ordinary mechanic may be safely trusted to see what ought to be apparent to everyone."

We cannot understand how the Office can properly hold that the combination of Bates and Weber to produce a combination similar to applicant's is an obvious matter which should be apparent to anyone when it appears and is well known that the art of gas engine ignition is and for many years past has been extremely active and still prior to the invention of this applicant no one of the hundreds of engineers engaged in the production of ignition mechanisms per-

541428 145

—11—

(Endorsed) Jan 29 1919

886 ceived that it was either possible or desirable to eliminate the operation of an ignition magneto during missing or non-firing periods of engine operation. The mechanism whereby applicant accomplishes the result of his invention may be extremely simple but it is a real invention neverthe-

less. He departed from the recognized practice of the art and cut his magneto out of operation during missing or non-firing periods of engine operation, whereas all his predecessors who had employed magnetos had used continuously operating magnetos.

The Claims

The claims now in the application and under final rejection are as follows:

1. In an explosive engine, the combination with a magneto, of means for operating the magneto by the running of the engine, a speed governor operated by the engine, and means under the control of the speed governor for rendering the magneto operating means inoperative when the engine passes or exceeds a predetermined speed.

2. The combination in an explosive engine having a speed governor, an exhaust valve operating rod operatively connected with the speed governor, of a magneto, means for operating the magneto by the running of the engine, and means adapted to be operated by the movement of the exhaust valve operating rod for rendering the magneto operating means inoperative.

541428 146

—12—

(Endorsed) Jan 29 1919

887 The claims which we sought to substitute by our amendment of July 18, 1916, filed July 20, 1916, are as follows:

1. In combination with an internal combustion engine, a speed governor associated with the engine and operatively connected therewith, ignition mechanism for said engine comprising make and break spark electrodes and a magneto, means operated by the engine for effecting the operation of both the magneto and spark electrodes in timed relation one to the other, and mechanism controlled by said speed governor for rendering said engine operated means incapable of effecting the operation of the magneto and spark electrodes whenever the engine passes or exceeds a certain predetermined speed.

2. An internal combustion engine of the hit and miss type having an exhaust valve, an exhaust valve operating rod and a speed governor in operative relation to said exhaust valve operating rod arranged to shift the latter

to hold the exhaust valve in open position whenever the engine exceeds a certain predetermined speed, in combination with an igniter comprising make and break electrodes, a magneto for supplying ignition current to said igniter, a reciprocating push rod driven by the engine for effecting actuation of the magneto and igniter electrodes together with means operated by the exhaust valve operating rod for rendering the reciprocating push rod incapable of actuating the magneto and igniter electrodes whenever, when the engine exceeds a certain predeter-

541428 147 —13—

(Endorsed) Jan 29 1919

888 mined speed, the exhaust valve operating rod and the governor co-operate to hold the exhaust valve in open position, as aforesaid.

3. In combination with an internal combustion engine, a speed governor driven from the engine, ignition mechanism for said engine comprising an igniter and a magneto for supplying ignition current to said igniter, actuating mechanism driven by the engine for effecting the operation of the magneto, and devices controlled by the speed governor for rendering said actuating mechanism incapable of effecting the operation of the magneto whenever the engine passes or exceeds a certain predetermined speed.

We believe that the claims in the application and under final rejection define patentable subject matter. It is possible, however, that the three claims which we have sought to have entered define the invention a little more clearly as to structure at least and for that reason are more desirable claims than those now in the application. In his action of July 17, 1916, the Examiner says, "the Examiner's position is that the Bates and Weber devices may be combined in the manner defined by the claims without invention." The Examiner then goes on to say, "When the Weber and Bates devices are combined in the manner defined by the rejected claims no new combination, result or effect is produced. This language leads us to believe that the Examiner is of the opinion that although applicant's combination does possess merit, the patentability of the combination is not brought out in the claims

541428 148 —14—

(Endorsed) Jan 29 1919

889 on appeal. We fail to understand the Examiner's position, but if the claims on appeal are in the opinion of the Office not patentable whereas those submitted by our unentered amendment of July 18, 1916, are patentable, we believe your Honor will and in equity should permit the last group of claims to be substituted for the two claims under final rejection.

We can hardly understand the Examiner's position when he says, "When the Weber and Bates devices are combined in the manner defined by the rejected claims no new combination, result or effect is produced." Applicant employs a magneto and eliminates the operation of that magneto during non-firing or overspeeding periods of engine operation. The Weber magneto is continuously operating, as we have previously pointed out, and Bates shows no magneto whatsoever. We do not admit, of course, that applicant's combination is a mere aggregation of both Bates and Weber, but we do urge that applicant has produced a new combination and has attained a new result or effect.

Conclusion:

We respectfully submit that inasmuch as it clearly appears that the applicant was the first to perceive the possibility and desirability of eliminating the operation of an ignition magneto during overspeeding or non-firing periods of engine operation and was the first to provide mechanism for attaining that end, he is clearly entitled to a claim or claims that will fully protect that which he has produced. We believe that

541428 149

—15—

(Endorsed) Jan 29 1919

890 we have clearly demonstrated that the trend and best practice of the art as it existed prior to applicant's invention was to employ continuously operating magnetos and that applicant departed from the beaten path when he perceived of the possibility and desirability of cutting out the magneto during non-firing periods and in providing mechanism for attaining that end.

We believe that your Honor should grant adequate patent protection to this applicant either by reversing the decision of the Board of Examiners in Chief as to the two claims now in the application or by directing the Primary Examiner to allow in their stead the three claims last above quoted and

which were submitted for the first time by our amendment of July 18, 1916, (Filed July 20, 1916).

It is clear that this applicant has made magneto ignition cheaper and that a return to the prior art in the class of apparatus to which this invention relates would be a retrogression. Measured by the test laid down in the case of *O'Rourke vs. McMullen*, (88 C. C. A. 115), it seems clear that this applicant is entitled to a patent. In that case the court said:

"Has the patentee added anything of value to the sum of human knowledge, has he made the world's work easier, cheaper and safer, would the return to the prior art be a retrogression? When the court has answered this question, or these questions, in the affirmative, the effort should be to give the inventor the just reward of the contribution he has made."

Respectfully submitted,

EDMUND JOSEPH KANE,

By WILLIAMS & BRADBURY

Attorneys.

541428 150

—16—

(Endorsed) Jan 29 1919

891 Recor. Volume 120

541,428—34

Page 349

Hearing:

September 13, 1916.

MSD

IN THE UNITED STATES PATENT OFFICE.

Ex parte Edmund Joseph Kane.

Application for Patent.

Appeal from Examiners-in-Chief.

Electric Igniters for Explosive Engines.

Application filed February 2, 1910, No. 541,428.

Messrs. Williams & Bradbury for applicant.

The applicant appeals from the decision of the Board of

examiners-in-chief sustaining the ruling of the primary examiner that it did not involve invention to produce the device defined in the following claims, in view of the prior patents of Weber, No. 820,535, of May 15, 1906, and of Bates, No. 946,815, of January 18, 1910:

1. In an explosive engine, the combination with a magneto, of means for operating the magneto by the running of the engine, a speed governor operated by the engine, and means under the control of the speed governor for rendering the magneto operating means inoperative when the engine passes or exceeds a predetermined speed.

2. The combination in an explosive engine having a speed governor, and an exhaust valve operating rod operatively connected with the speed governor, of a mag-
541428 151

(Endorsed) Jan 29 1919

892 neto, means for operating the magneto by the running of the engine, and means adapted to be operated by the movement of the exhaust valve operating rod for rendering the magneto operating means inoperative.

The subject matter of the application is an explosive engine of the type in which the explosions are caused to cease whenever the engine, being under small load, overruns a predetermined speed limit. As explained in the Bates patent at page 1, line 14, there is provision for a governor which maintains the exhaust valve open for this purpose. Bates, having noted that in such engines there were no means for eliminating the spark while the exhaust was held open, undertook to cure this defect by combining with a reciprocating rod, operated by the engine to close a switch and cause a spark from a battery, another moving element operated by the governor to put the switch-operating device out of commission when the exhaust valve was held by reason of the overspeeding. Engines of this type have been frequently provided with an ignition system which employs a magneto, which is essentially a device for relatively moving two magnetic fields to generate a current, which current was caused to jump across a spark gap located in the cylinder. There are rotary magnetos and oscillating magnetos, and both Weber and the applicant employ oscillating magnetos.

In the Weber patent, which it will be noted antedates
541428 152

(Endorsed) Jan 29 1919

893 Bates about five years, the moving member of the magneto is pushed forward against a spring to a given point and then the pushing device is tripped allowing the movable member to be suddenly thrown back. The device which operates the oscillating magneto is the push rod 35, moved by the arm 37 on the shaft 36, connected with the engine; the escapement is caused by the arm 35 striking the wedge 42. The sudden movement of the armature causes a momentary current of sufficient intensity to produce a spark between two electrodes, which at that moment are either closed or separated (page 3, line 100). This magneto, of course, operates at every stroke of the piston whether there is a load on the engine or not; there is no suggestion of suspending the operation of the magneto or the occurrence of the spark. The Bates patent, on the other hand, makes no suggestion of how the spark interrupting device could be adopted to use with a magneto.

The use of a magneto, whether of the oscillating or the rotary type, involved the necessity of its moving parts being precisely timed with the making or breaking of the contact which causes the spark, and it had apparently been considered necessary to operate the magneto simultaneously with the engine all the time. It is in evidence that the most commonly used magneto was of the rotary type. The applicant seeks to eliminate the wear and tear and waste of energy on the magneto by not only interrupting the spark, but by stop-

541428 153
(Endorsed) Jan 29 1919

894 ping the operation of the magneto itself, at the times when there is to be no explosion and no spark is needed. The applicant states in his brief, and nothing in the record negatives the statement, that:

* * * It was not until after the applicant had made his invention that engine manufacturers came to learn that it was possible to eliminate the operation of the magneto during overspeeding or non-firing periods and at the same time have the magneto always in readiness properly to perform its function when the engine ceased to overspeed.

But the Board, in holding there was no invention presented by the applicant, said that anyone applying the rocking magneto of Weber to the Bates engine would naturally adapt the

Bates mechanism to the suspension of the operation of the magneto when the exhaust valve is held open by the governor.

In the applicant's device the rod 36 is regularly reciprocated by the engine and as it moves forward it strikes the arm 35, fixed on the rocker shaft 16, which in rocking turns the rotary member of the magneto through an angle so as to warp the magneto field. When the rod 36 progresses until the wedge 62 rides up on the roller 38, the forward end of the rod is lifted and escapes the arm 35, thus allowing the shaft 16 to be thrown back suddenly by the spring 31, which has the effect of creating a momentary current and at the same time of making or breaking the contacts 10, 26, located in the

541428 154
(Endorsed) Jan 29 1919

895

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cylinder. When the speed of the engine passes the proper limit, the governor shown attached to the shaft 5 operates to lower the bar 54 and hold the rod 43 forward in such a position that the roller 61, acting on the wedge 64, prevents the push rod 36 from dropping low enough to engage the rock arm 35.

The invention resides in this arrangement by which the governor interrupts the actuating mechanism of the magneto and spark gap. It is a simple device; but the point is that before one can devise means for doing this thing he must first conceive of the desirability of doing it, of the advantages to be gained, and recognize the fact that the thing can be done. As the Seventh Circuit Court of Appeals said in *General Electric Co. v. Sangamo Electric Co.*, 174 Fed. Rep., 246, 251, invention "is the double mental act of discerning, in existing machines * * *, some deficiency, and pointing out the means of overcoming it."

It was the opinion of the Board that it would be natural and obvious, in view of the patents of Bates and Weber, to put the magneto in place of the switch 11 of the Bates patent and operate it in the same way. Since the decision of the Board, the applicant has filed an expert affidavit, apparently showing that on the contrary the natural and obvious thing to do, would not be this, but would be to interrupt the spark alone, as Bates did, and not the magneto. A well known and

541428 155
(Endorsed) Jan 29 1919

late device is the spark interrupter used with a magneto in the catalogue of the Termaat & Monahan Co., filed as an exhibit with the Brown affidavit in the record. Given the desirability of an improvement, the test of obviousness is whether anyone saw it. The evidence shows that a skilled engine builder in full view of the patents of Bates and Weber, got from Bates no hint to interrupt the operation of the magneto, but only the idea of interrupting the spark. It would not be a mere case of substitution to put Weber's generating magneto in place of Bates' switch 11, because Bates' switch 11 is not a generator. It is only a switch, and it necessarily implies the presence of a battery, which Weber dispenses with. The part of Weber's device which corresponds to Bates' switch 11 is the spark gap 36, the magneto corresponding in function to Bates' battery. It cannot be denied that the applicant has produced a new and valuable function by his improvement, simple as it is. It can not be held that the change did not involve invention. On the contrary, it clearly did involve invention, at least as broad as the claims presented, either on the appeal or in the proposed amendment offered July 21, 1916.

The decision of the Board accordingly must be reversed.

F. W. H. CLAY
Assistant Commissioner.

September 20, 1916.

541428 156

(Endorsed) Jan 29 1919

897

Letter No. 35

2—03

Address only
The Commissioner of Patents
Washington, D. C.

EEG

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

September 20, 1916.

| | | |
|---|---|-----------------------------------|
| In the matter of the Application of Edmund J. Kane, Electric Igniters for Explosive Engines; Filed Feb. 2, 1910 Serial No. 541,428. | } | On Appeal to the Commissioner. |
|---|---|-----------------------------------|

Sir:

Please find enclosed herewith a copy of the decision of the
Assistant Commissioner in the above entitled case.

By direction of the Commissioner:

Very respectfully,

Chief Clerk.
F.

Edmund J. Kane,
c/o Williams & Bradbury,
720 Monadnock Block
Chicago, Ill.

541428 157

(Endorsed) Jan 29 1919

(Rubber Stamps) Application Room Sep 29 1916 U. S. Patent Office. U. S. Patent Office, Sep 30 1916 Division XXVIII. 36

UNITED STATES PATENT OFFICE

Applicant—Edmund Joseph Kane

Invention—Electric Igniters for Explosive Engines

Serial No.—541,428

Case 1.

Room 63

Div. 28

Filed February 2, 1910.

September 29, 1916.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

In the matter of the above entitled application which has just been returned to the Primary Examiner after a decision Commissioner

by the Assistant * (*Examiner*) on the merits, we respectfully request that the three claims included in our amendment of July 20, 1916, be renumbered and entered in the application as claims 3, 4 and 5. Kindly disregard that part of our amendment of July 20th, requesting that the two claims involved in the appeal be canceled. We understand from the Principal Examiner that in view of Assistant Commissioner Clay's decision * (*that*) there can be no objection to the entry of these three additional claims inasmuch as the Assistant Commissioner has held these claims involve patentable subject-matter. The application is now in condition for formal allowance and it is respectfully requested.

Respectfully submitted,

EDMUND J. KANE.

By WILLIAMS & BRADLEY

Attorneys.

541548 158

(Endorsed) Jan 29 1919

*Matter in italics in parentheses, stricken out in original transcript.

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K. O'D.

2—181

Address only
The Commissioner of Patent,
Washington, D. C.

Serial No. 541,428.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington Oct. 4, 1916.

Edmund Joseph Kane, Assor.

Sir: Your Application for a patent for an Improvement in Electric Igniters for Explosive Engines, filed Feb. 2, 1910, has been examined and Allowed.

The final fee, Twenty Dollars, must be paid not later than Six Months from the date of this present notice of allowance. If the final fee be not paid within that period, the patent on this application will be withheld, unless renewed with an additional fee of \$15, under the provisions of Section 4897, Revised Statutes.

The office delivers patents upon the day of their date, and on which their term begins to run. The printing, lithographing, and engrossing of the several patent parts, preparatory to final signing and sealing, will require about four weeks, and such work will not be undertaken until after payment of the necessary fee.

When you send the final fee you will also send, Distinctly and Plainly Written, the name of the Inventor, Title of Invention, and Serial Number as Above Given, Date of Allowance (which is the date of this circular), Date of Filing, and, if assigned, the Names of the Assignees.

If you desire to have the patent issue to Assignees, an assignment containing a Request to that effect, together with the Fee for recording the same, must be filed in this office on or before the date of payment of final fee.

After issue of the patent uncertified copies of the drawings and specifications may be purchased at the price of Five Cents Each. The money should accompany the order. Postage stamps will not be received.

Final fees will Not be received from other than the appli-

Defendants' Exhibit No. 54.

agent, his assignee or attorney, or a party in interest as shown by the records of the Patent Office.

Respectfully,

THOMAS EWING
Commissioner of Patents.

Williams & Bradbury,
720 Monadnock Block,
Chicago, Illinois.

(In right-hand margin) ~~25~~ In Remitting the Final Fee
Give the Serial Number at the Head of This Notice.

(In left-hand margin) ~~25~~ Uncertified Checks Will Not Be
Accepted.

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(Endorsed) Jan 29 1919

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(Across face) \$20 Ch E. C. C. U. S. Pat. Office.
Williams, Bradbury & See
Attorneys and Counselors
in
Patent and Trade-Mark Causes
1315 Monadnock Block
Chicago

Lynn A. Williams
Clifford C. Bradbury
Robert M. See
Albert G. McCaleb
Robert F. Bracke

October 14, 1916.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

We enclose herewith Lynn A. Williams' check for \$20.00 in payment of the final fee on the patent application of Edmund Joseph Kane for an improvement in Electric Igniters for Explosive Engines, Serial No. 541,428, filed February 2, 1910, allowed October 4, 1916, and assigned to the Webster Electric Company.

Respectfully,

Enclosure.

WILLIAMS, BRADBURY & SEE

541428 160

(Endorsed) Jan 29 1919

906

2—421

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Contents:

Print S Mar 3, 1915

1. Application O K papers.
2. Rejection March 26 1910
3. Amdt A Mar. 15/11
4. Amdt B Mar 16/11
5. Rejection May 4—1911
6. Amdt C Feb. 17, 1912
7. Rejection Mar. 29, 1912
8. Amdt D Feb. 15, 1913
9. Rejection Apr 22—1913
10. Ind. Power of Atty. Feb. 19, 1914.
11. Amdt E Apr. 18, 1914
12. Final Rej. May 9—1914
13. Amdt F Oct 22, 1914
14. Letter Nov. 12—1914
15. Ex'rs-in-Chief (\$10) Feb. 23, 1915.
16. Examiners State, Feb. 27, 1915.
17. Hearing April 7/15/P. M.
18. Brief March 31/15
19. Decision by Board (Aff'd.) June 26/15.
20. Notice of Decision June 26/15.
21. Power to Inspect Jan 21/16
22. Revocation and Power of Attorney April 26/16
23. Notices of Revocation and Acceptance May 2/16
24. Examiners-in-Chief (\$10) June 26, 1916.
25. Notice of Hearing, July 1, 1916
26. Petition to remand to Ex. July 12, 1916.
27. Notice of approval July 13/16.
29. Rej. July 17—1916
30. * (*Proposed*) Amdt G * (*not enter*) July 30/16.
31. Letter July 21—1916.
32. Notice of hearing Aug. 24, 1916
33. Brief Sept. 15/16
34. Commr's Decision Sept. 20/16
35. Notice of decision Sept. 26, 1916
36. Letter Sept 29/16.
- 37.
- 38.
- 39.
- 40.

*Matter in italics in parentheses, stricken out in original transcript.

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541428 161

(Endorsed) Jan 29 1919 11,587/19

907

2—390.

UNITED STATES OF AMERICA,

DEPARTMENT OF THE INTERIOR,

United States Patent Office.

To all to whom these presents shall come, Greeting:

This is To Certify that the annexed is a photographic copy
from the Records of this Office of the File Wrapper and
Contents in the matter of the

Letters Patent of

Edmund Joseph Kane, Assignor, by Mesne Assignments, to
Webster Electric Company,

Number 1,280,105, ———— Granted September 24, 1918,
for

Improvement in Electric Igniters.

In Testimony Whereof I have hereunto set my hand and
caused the seal of the Patent Office to be affixed at the City
of Washington, this 29th day of January, in the year of our
Lord one thousand nine hundred and nineteen and of the In-
dependence of the United States of America the one hundred
and forty-third.

F W H CLAY

Acting Commissioner of Patents.

(Seal)

6—1625

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Vol. III.
TRANSCRIPT OF RECORD.

SUPREME COURT OF THE UNITED STATES
OCTOBER TERM, 1922.

No. 93.

WEBSTER ELECTRIC COMPANY, PETITIONER,

vs.

SPLITDORF ELECTRICAL COMPANY.

**WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE SEVENTH CIRCUIT.**

PETITION FOR CERTIORARI FILED JULY 31, 1922.

CERTIORARI AND RETURN FILED DECEMBER 13, 1922.

(29,070)

(29,070)

SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, 1923.

No. 93.

WEBSTER ELECTRIC COMPANY, PETITIONER,

vs.

SPLITDORF ELECTRICAL COMPANY.

ON WRIT OF CERTIORARI TO THE UNITED STATES CIRCUIT COURT
OF APPEALS FOR THE SEVENTH CIRCUIT.

VOLUME III.

INDEX.

| | Page. |
|---|-------|
| Defendant's Exhibit No. 57—Decision of the Court of Appeals of the District of Columbia in the interference with Kane vs. Podlesak..... | 700 |
| No. 66—Assignment of John L. Milton to Lynn A. Williams, trustee, dated April 10, 1912.. | 702 |
| No. 67—Assignment of Lynn A. Williams, trustee, to Webster Electric Co., dated June 28, 1918 | 704 |
| No. 68—Assignment of Webster Electric Co. of West Virginia to Webster Electric Co. of Wisconsin, dated March 12, 1918..... | 705 |
| No. 73—Transcript of record in the municipal court of Chicago, Cook County, State of Illinois, in case of Webster Electric Co. of West Virginia vs. Tesla Emil Podlesak | 710 |

| | Page. |
|---|-------|
| Defendant's Exhibit No. 73--Placita | 710 |
| Præcipe for summons..... | 711 |
| Summons | 712 |
| Return to summons..... | 712 |
| Special appearance of Tesla Emil Podlesak.. | 713 |
| Order extending time for filing statement of claim..... | 714 |
| Notice of petition for removal..... | 714 |
| Petition for removal..... | 716 |
| Bond for removal..... | 718 |
| Order extending time for filing statement of claim..... | 719 |
| Order of removal..... | 719 |
| Certificate of clerk..... | 720 |
| No. 74--Statement of claim filed in municipal court of Chicago, Cook County, State of Illi- nois, in case of Webster Electric Co. of West Virginia vs. Tesla Emil Podlesak. | 721 |
| License agreement between Emil Podlesak and Henry Joseph Podlesak, parties of the first part, and Webster Electric Co. of West Vir- ginia, dated February 5, 1914..... | 722 |
| License agreement (shop right) between Emil Podlesak and Henry Joseph Podlesak, parties of the first part, and Webster Elec- tric Co. of West Virginia, dated February 5, 1914 | 726 |
| No. 75--Stipulation, filed January 25, 1918, in U. S. district court, northern district of Illinois, eastern division, in case of Webster Electric Co. of West Virginia vs. Tesla Emil Pod- lesak | 739 |
| No. 76--Order of January 25, 1918, dismissing case of Webster Electric Co. vs. Tesla Emil Podlesak, No. 22,313..... | 740 |
| No. 16--Drawing | 741 |
| No. 20--Drawing | 742 |
| No. 51--Illustrations of magnetos..... | 745 |
| Specification No. 365,506, R. E. Olds, October 24, 1899..... | 748 |
| No. 773,062, R. & J. Cooper, October 25, 1904..... | 756 |
| No. 754,286, F. Dickinson, March 8, 1904..... | 764 |
| No. 820,535, G. J. Weber, May 15, 1906..... | 768 |
| No. 909,264, L. H. Wattles, January 12, 1909..... | 778 |
| No. 916,312, R. Henning, March 23, 1909..... | 788 |
| No. 947,647, H. J. Podlesak and T. E. Podlesak, January 25, 1910 | 802 |
| No. 948,483, H. J. Podlesak and T. E. Podlesak, February 8, 1910..... | 808 |
| No. 990,935, L. H. Wattles, May 2, 1911..... | 814 |
| No. 1,003,649, H. J. Podlesak and T. E. Podlesak, Septem- ber 19, 1911..... | 824 |

INDEX.

iii

| | Page. |
|---|-------|
| Specification No. 1,022,642, H. J. Podlesak, April 9, 1912..... | 834 |
| No. 1,051,373, J. L. Milton, January 21, 1913..... | 840 |
| No. 1,053,107, J. L. Milton, February 11, 1913..... | 846 |
| No. 1,056,360, T. E. Podlesak and H. J. Podlesak, March 18, 1913..... | 854 |
| No. 1,006,048, J. L. Milton, May 12, 1914..... | 866 |
| No. 1,008,052, E. Podlesak, May 26, 1914..... | 874 |
| No. 1,008,754, E. Podlesak, June 2, 1914..... | 888 |
| No. 1,101,956, E. Podlesak, June 30, 1914..... | 898 |
| No. 13,878, E. Podlesak, reissued February 9, 1915..... | 904 |
| No. 1,204,573, E. J. Kane, November 14, 1916..... | 914 |
| No. 1,236,790, H. R. Van Deventer, August 14, 1917..... | 924 |
| No. 1,280,165, E. J. Kane, September 24, 1918..... | 932 |
| clerk's certificate..... | 937 |
| writ of certiorari and return..... | 937 |
| Defendant's Exhibit 56—Transcript of record in case of Edmund J. Kane vs. Emil Podlesak, No. 1147, in the Court of Appeals of the District of Columbia | 940 |
| Petition of appeal to Court of Appeals..... | 940 |
| Certificate of Commissioner to record..... | 944 |
| Papers selected in the matter of the reissue letters patent granted to Emil Podlesak, numbered 13,878, dated February 9, 1915, for current-generators and igniters for internal-combustion engines..... | 944 |
| | Page. |
| Petition of Emil Podlesak..... | 944 |
| Specification of Emil Podlesak..... | 945 |
| Oath of Emil Podlesak..... | 953 |
| Abstract | 956 |
| Interference letter, dated October 26, 1915 | 957 |
| Printed specification and drawings, patent No. 13,878..... | 959 |
| Papers selected in the matter of the application of Edmund Joseph Kane, assignor to Webster Electric Company, filed January 14, 1915, for electric igniters, serial number 2097 | 960 |
| Petition of Edmund Joseph Kane..... | 960 |
| Specification of Edmund Joseph Kane.. | 960 |
| Oath of Edmund Joseph Kane..... | 964 |
| Letter of examiner, dated March 24, 1915 (rejection)..... | 965 |
| Amendment A, filed April 17, 1915.... | 965 |
| Letter to office and supplemental oath, filed May 10, 1915..... | 969 |
| Letter of examiner, dated August 6, 1915 (rejection) | 970 |

Defendant's Exhibit 56—

| | Page. |
|---|-------|
| Interference letter, dated August 24, 1915 | 971 |
| Amendment, filed August 26, 1915..... | 973 |
| Circulars (3)..... | 979 |
| Petition, filed September 3, 1915, and Commissioner's decision thereon, dated September 15, 1915..... | 979 |
| Affidavit of Edmund Joseph Kane, filed September 7, 1915..... | 982 |
| Examiner's statement, dated September 8, 1915..... | 983 |
| Amendment, not entered, filed September 20, 1915..... | 983 |
| Petition, filed October 6, 1915, and Commissioner's decision thereon, dated October 9, 1915..... | 986 |
| Examiner's statement, dated October 9, 1915 | 988 |
| Request for jurisdiction, dated October 18, 1915..... | 988 |
| Amendment B, filed October 18, 1915.. | 989 |
| Interference letter, dated October 26, 1915 | 991 |
| Drawing (1 sheet)..... | 993 |
| Papers selected in the matter of letters patent granted Emil Podlesak, numbered 1,055,076, dated March 4, 1913, for current generators and igniters for internal-combustion engines | 994 |
| Petition and specification of Emil Podlesak | 994 |
| Oath of Emil Podlesak..... | 1002 |
| Letter of examiner, dated July 5, 1912 (rejection) | 1003 |
| Amendment A, filed November 8, 1912.. | 1004 |
| Amendment B, dated February 18, 1913. | 1005 |
| Printed specification and drawings, patent No. 1,055,076..... | 1007 |
| In the matter of interference No. 39,181, Podlesak vs. Kane..... | 1014 |
| Copy of U. S. patent to G. J. Weber, No. 820,335 | 1014 |
| Copy of U. S. patent to L. H. Wattles, No. 990,935..... | 1022 |
| Copy of U. S. patent to J. L. Milton, No. 1,006,048 | 1029 |
| Copy of U. S. patent to E. Podlesak, No. 1,008,052 | 1035 |
| Copy of U. S. patent to E. J. Kane, No. 1,204,573 | 1044 |

INDEX.

v

Defendant's Exhibit 56—

| | Page. |
|---|-------|
| Declaration of interference, dated October 20, 1915..... | 1053 |
| Preliminary statement of Podlesak, filed November 27, 1915..... | 1056 |
| Order to show cause, dated December 17, 1915..... | 1057 |
| Motion to dissolve, filed February 1, 1916 | 1057 |
| Decision of the Commissioner on motion, dated February 3, 1916..... | 1061 |
| Brief for Podlesak on motion to dissolve, filed March 9, 1916..... | 1062 |
| Decision of the law examiner, on motion, dated March 22, 1916..... | 1068 |
| Decision of examiner of interferences, dated March 24, 1916..... | 1073 |
| Appeal to examiners-in-chief, filed April 5, 1916 | 1074 |
| Motion to advance date of hearing, filed April 25, 1916..... | 1075 |
| Decision of examiners-in-chief on motion, dated April 26, 1916..... | 1078 |
| Brief for Emil Podlesak, filed May 16, 1916.. | 1079 |
| Decision of examiners-in-chief, dated January 15, 1917..... | 1091 |
| Appeal to Commissioner, filed February 5, 1915 | 1092 |
| Brief for Emil Podlesak, filed March 10, 1917. | 1094 |
| Decision of the Commissioner, dated June 18, 1917 | 1105 |
| Notice of appeal to the Court of Appeals, filed August 6, 1917..... | 1107 |

908 123—149
Number (Series of 1915). (Ex'r's Book) 105—22

2097 1915
Div. 28 Patent No. 1280105

Name Edmund Joseph Kane

Assr. by mesne assgts to Webster Electric Company, of
Racine, Wis., a corp. of **(West Virginia)* Wisconsin.

of Chicago

County of

State of Illinois

Invention Electric Igniters

| Parts of Application Filed | Original | | Renewed | |
|---------------------------------|------------------|------------------|---------|-------|
| | | | | |
| Petition | Jan 14, 1915 | | | , 191 |
| Affidavit | " " | , 1915 | | , 191 |
| Specification | " " | , 1915 | | , 191 |
| Drawing | " " | , 1915 | 262 | , 191 |
| Photo Copy | | , 191 | | , 191 |
| First Fee 1 Cash \$15 | Jan 14, 1915 | | | , 191 |
| " " Cert. | | , 191 | | , 191 |
| Appl. filed complete | Jan 14, 1915 | | | , 191 |
| Examined and Passed for Issue | Aug 9, 1918 | | | , 191 |
| A R Benson Exr. Div. 28 | | Exr. Div. | | |
| Notice of Allowance | August 27, 1918, | | | , 191 |
| By Commissioner. | | By Commissioner. | | |
| Final Fee Cash \$ ²⁰ | Aug 29, 1918 | | | , 191 |
| " " Cert. | | , 191 | | , 191 |
| Patented | Sep 24 1918 | | | , 191 |

Attorney **(Brown, Nissen & Sprinkle*

312 So. Dearborn St. Chicago Ill.)

2 **(Associate)* Attorney Williams & Bradbury,
720 Monadnock Block, Chicago, Illinois.

✓ ✓

3 (No. of Claims Allowed 8) Title as Allowed Electric Igniter
(Cl. 123-149)

6—1618

Cls 1, 3, 5. ✓ 908

(In left-hand margin) Division of App., No. 541428, filed
Feb 2, 1910 Pat #1204573

(Endorsed) Jan 27 1919

*Matter in italics in parentheses, stricken out in original transcript.

909 Frank T. Brown.
Charles M. Nissen.
Arthur L. Sprinkle.

Law Offices of
Brown, Nissen and Sprinkle,
Patent and Trades-Mark Law a Specialty.
Suite 1124 Monadnock Building,
312 S. Dearborn Street,

Telephone Harrison 292 Chicago,
Cable Address "Brohop" Jan. 11, 1915.
(Rubber stamp) \$15. Received M Jan R 14 1915 Chief Clerk
U. S. Patent Office.
The Commissioner of Patents,
Washington, D. C.

Sir:

Enclosed find papers and drawing for application for patent in the name of Edmund Joseph Kane for an Improvement in Electric Igniters, together with our check for \$15.00 in payment of the filing Government fee thereon.

Very respectfully,

S

BROWN, NISSEN & SPRINKLE

Enc.

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(Endorsed) Jan 27 1919

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(Rubber stamp) Mail Room Jan 14 1915 U. S. Patent

Office

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PETITION

To the Commissioner of Patents:

The petition of Edmund Joseph Kane, a citizen of the United States, residing at Chicago, in the County of Cook, State of Illinois, and whose Post Office address is 125 South Waller Street, Chicago, Ill., prays that Letters patent may be granted to him for the improvement in Electric Igniters, as set forth in the annexed specification.

And he hereby appoints Brown, **(Hopkins)*, Nissen & Sprinkle, (a firm composed of Frank T. Brown, **(Francis A. Hopkins)*, Charles M. Nissen & Arthur L. Sprinkle, Registra-

*Matter in italics in parentheses, stricken out in original transcript.


3604

tion No. *(3119)), 1124 Monadnock Block, 312 So. Dearborn Street, Chicago, State of Illinois his attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign the drawings, to receive the Patent, and to transact all business in the Patent Office connected therewith.

Signed at Chicago, in the County of Cook, and State of Illinois, this 11th day of January, 1915.

(1) Inventor's signature EDMUND JOSEPH KANE.

(Documentary Internal Revenue stamp 25c canceled)

 Inventor must sign papers in three places.

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(Endorsed) Jan 27 1919

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*(SPECIFICATION.)

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To All Whom It May Concern:

Be It Known that I, Edmund Joseph Kane, a citizen of the United States, residing at Chicago, in the County of Cook and State of Illinois, have invented certain new and useful improvements in

Electric Igniters,

of which the following is a specification.

My invention relates to magneto generators for ignition systems of explosive engines, and this application is a division of my prior application for Electric Igniters for Explosive Engines, filed February 2, 1910, Serial Number 541,428.

The object of my invention is to provide a simple and efficient device of the character mentioned. A further object is to reduce wear and hammering of the electrical make-and-break contacts, and other parts of the generator.

My improvement consists in substantially the combination and arrangement of parts hereinafter described, shown in the accompanying drawing forming a part of this specification, and more particularly specified in the subjoined claims.

In the drawing:

(Fig.) 1 is a top view of a magneto generator, shown as attached to fragments of an explosive engine, and embodying my invention.

*Matter in italics in parentheses, stricken out in original transcript.

Fig. 2 is a section taken on line 2-2 of Fig. 1, but showing a larger portion of the cylinder of the engine than in Fig. 1,
2097 3

(Endorsed) Jan 27 1919

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912 and showing parts of the magneto cut away in broken lines; and,

Fig. 3 is a fragmentary view of a portion of the device taken as on line 3-3, in Fig. 1.

My invention is particularly adaptable to the type of magneto generators employing an oscillatory armature or inductor, and in connection with the make-and-break type of ignition systems.

In the drawing, an explosive engine 1, fragments of which are shown, is provided with a suitable opening for the ignition points of a make-and-break system, and around this opening, on the outer side of the cylinder wall, is an ignition block 8, provided with an extension 9 extending through said opening into the cylinder. At the inner end of the extension 9 is carried the fixed contact 10 of the make-and-break system. The electrode 10 is mounted in block 8 and insulated therefrom in the usual manner, such insulation not being shown. At the outer end of the contact member 10 is secured a conductor wire 11, between nuts 12 and 13.

On block 8 is an arm 14 having a bearing member 15 at its outer end. In the bearing member is journaled a shaft 16, which carries the armature or inductor 17. The inductor 17 rotates between the field-cores 18 and 19. The cores 18 and 19 are provided with suitable electrical windings and are formed on the pole pieces 20 and 21, and the latter are joined by fixed magnets 22 and 23. The pole pieces 20 and 21 are carried on [^] *(an extension 35 formed on the bearing member 15.)*
insert B¹

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One end of the conductor 11 is connected to or

is

*(a) part of the winding on pole-core 19, and the latter is connected to the winding on pole-core 18 in the usual manner, and is not specifically shown.

*Matter in italics in parentheses, stricken out in original transcript.

The other end 24 of the winding on pole-core 18 is
 supporting block at the
 secured to the **(extension)* 25 **(by a)* set screw
 or other suitable fastening means
 25^a ^ to ground the circuit in the framework of the
 magneto. A movable contact 26 is adapted to
 co^{*}(-)operate with fixed contact 10, and is pro-
 vided with a portion extending through block 8,
 and in electrical contact therewith. On the outer
 & beyond
 end of the portion 26 which extends through ^
 block 8 is fixed an arm 27, and on the extended por-
 tion of part 26 is mounted a torsion spring 28 with
 one end engaging block 8, and the other end
 engaging
 ^ **(resting on)* arm 27 in a manner to cause con-
 tacts 26 and 10 to normally remain in contact. In the
 free end of arm 27 is threaded an anvil 29. The
 anvil is adjustably mounted in the free end of
 arm 27, so that timing of the engine may be varied
 slightly by such adjustments.

Secured on the shaft 16 is a yoke member 30,
 having two arms extending in opposite directions
 from shaft 16, with one of the arms 30 positioned
 at one end of anvil 29, and adapted, upon oscilla-
 tion of shaft 16, to cause movement of the anvil to
 open the contacts 26-10, as will be described later.
 The arms of member 30 are provided with lateral
 extensions which are connected to tension springs
 31 and 32, said springs being secured at their other
 ends to brackets 33 and 34 on pole pieces 20 and 21,
 so that the tension of springs 31 and 32 normally
 maintains the arm member 30 in a position so that
 in striking relation (2)
 one of its arms is **(closed)* to the anvil 29, ^ On

Insert B¹/₂
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the member 30 is an actuating arm 35 adapted to
 be engaged by a plunger 36. The plunger 36 is
 from
 actuated / **(by)* the crank shaft of the engine, not

[†]Matter in small type, inserted in red ink in original transcript.

shown. The end of plunger rod 36 which engages arm 35 is mounted on a flanged roller 38, and the latter journaled on an arm 37 formed on bearing member 15. The plunger 36 is provided with a wedged member or inclined cam surface on member 62, so that upon longitudinal movement of the plunger, the latter will engage arm 35 to oscillate member 30 and arm 35, and after riding on the cam surface will be raised from the arm 35, permitting springs 31 and 32 to restore member 30 to its normal position. Owing to the elasticity of springs 31 and 32 and the momentum of member 30, the latter will be carried slightly past its normal position, and engage anvil 29 and rock contact member 26 away from contact 10 to open the electric circuit. This opening of the circuit produces

Insert B²
per B

(53) ¶

the spark for igniting the engine. ^ The portion of member 30 which engages the bottom of anvil 29 is preferably rounded or curved, in order to effect uniform movement of the arm 27 during the time the member 30 is in contact with anvil 29. The field pieces and inductor are not shown in detail, since their specific parts are not part of this invention. Any suitable field pieces or inductor may be used, as desired.

While I have illustrated and described the preferred form of my invention, I do not desire to be limited to the precise details and arrangement set forth, but desire to avail myself of such variations and changes as may come within the scope of the appended claims.

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¶ I Claim:

1. In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction,

means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

2. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the

yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with the yoke, and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

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3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation with the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be en-

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gaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

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4. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

5. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating

actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine,

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and an impact member fixed relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

6. In a device of the class described, a field magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the field magnet, a yoke mounted upon said shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an ignition spark in the combustion chamber of the engine.

per D

*(Insert

A')

(Insert

C') >

(Cls 7-8)

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In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 11th day of January, A. D. 1915.

(2) EDMUND JOSEPH KANE.

Witnesses:

ARTHUR L. SPRINKLE,

THOMAS COLSON.

OATH

County of Cook, }
State of Illinois. } ss.

Edmund Joseph Kane, the above named petitioner being duly sworn (affirmed), deposes and says that he is a citizen of the United States and resident of Chicago, in the County of Cook, and State of Illinois; that he verily believes himself to be the original, first, and sole inventor of the improvement in Electric Igniters, described and claimed in the foregoing specification; that he does not know and does not believe that the same was ever known or used before his invention or discovery thereof, or patented or described in any printed publication in any country before his invention or discovery thereof, or more than two years prior to this application, or in public use or on sale in the United States for more than two years prior to this application; that said invention has not been patented in any country foreign to the United States on an application filed by him or his legal representatives or assigns more than twelve months prior to this application; and that no application for patent on said improvement has been filed by him or his representatives or assigns in any country foreign to the United States.

(3) Inventor's signature EDMUND JOSEPH KANE.

Sworn to and subscribed before me this 11th day of January, A. D. 1915.

CHARLES H. SEEM
Notary Public.

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Notarial
Seal
Required

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2-260

Div. 28 Room 63

Paper No. 2

15-5

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

All communications respecting this application should give the serial number, date of filing, title of invention, and name of the applicant.

RYH

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

March 24, 1915.

(Rubber stamp) U. S. Patent Office, Mar 24 1915 Mailed.
Brown, Nissen & Sprinkle,
312 So. Dearborn St.,
Chicago, Ill.

Please find below a communication from the Examiner in charge of the application of Edmund Joseph Kane, S. No. 2097, filed Jan. 14, 1915, Electric Igniters.

THOMAS EWING
Commissioner of Patents.

This case has been examined.

Claim 6 is rejected upon

Weber, 820,535, May 15, 1906 (123-149 s).

The remaining claims are allowable, as at present advised.

Applicant's attention, however, is directed to

Podlesak, 1,098,052, May 26, 1914 (123-149 s), and

Podlesak, 1,055,076, Mar. 4, 1913 (123-149 s),

as these may have bearing upon applicant's case.

BENSON,
Examiner.

HHG

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921 (Rubber stamps) Mail Room Apr 17 1915 U. S. Patent
Office. U. S. Patent Office, Apr 19 1915 Division XXVIII.

IN THE UNITED STATES PATENT OFFICE.

Division 28, Room 63,
Edmund Joseph Kane,
Electric Igniter,
Filed January 14, 1915,
Serial No. 2097.
The Commissioner of Patents,
Washington, D. C.
Sir:—

In the above entitled application, and in response to the
office letter of March 24, 1915, please amend as follows:—

Add the following claims:—

*(A¹)
pr D * (7. *The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.*

8. *The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the*

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rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

9. *The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable*

*Matter in italics in parentheses, stricken out in original transcript.

electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

10. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

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11. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

12. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to

*Matter in italics in parentheses, stricken out in original transcript.

hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

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13. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

14. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode, adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

15. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means

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tending to hold the rotor in a predetermined posi-

•Matter in italics in parentheses, stricken out in original transcript.

tion, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the

Insert rotor.)
C¹>

Remarks.

The six claims in this application as filed are the claims allowed in the Milton patent No. 1,096,048, granted May 12, 1914, and applicant desires that an Interference with Milton be declared by the office as soon as practicable.

Applicant notes that the Examiner has rejected claim 6 upon the Weber patent No. 820,535. It must be admitted that at first glance the language of this claim may be thought readable upon the Weber construction, but the claim is considered to be allowable to applicant for the same reasons that it was allowed to Milton, as Milton's structure is identical with that of applicant's, and as the present application is filed as a division of applicant's Serial No. 541,428, filed February 2, 1910, applicant appears to have priority over Milton with re-

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926 spect to filing dates, and desires to contest the claims of the Milton patent in Interference.

Regarding claim 6, which the Examiner has thought met by Weber, attention is called to the fact that this claim specifies "a yoke mounted upon said shaft for oscillation with said inductor." It can hardly be said that Weber has a yoke. A yoke in its ordinary significance means a member that joins two parts or things together, and the part 30 of the Kane application to each of the end branches of which the springs 31, 32 are attached, is properly described as a yoke. This is

*Matter in italics in parentheses, stricken out in original transcript.

also true of the member 15 having the lateral branches 16 comprising the yoke of the Milton patent No. 1,096,048 (See Figs. 1 and 4).

Referring now to the Weber construction, we fail to find a yoke in this sense. The only part that compares with applicant's yoke and the Milton yoke, is the radially extending arm 40, which is simply a lever secured to the shaft 15. The lever 40 does not have extension beyond the shaft 15, unless perchance the Examiner has noticed the impact member 41. Attention is called to the fact that the arm 41, however, is not a part of any yoke, because there is no spring secured to the arm 41, nor is there any connection leading therefrom to another spring, as in the Milton device, and in applicant's device.

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Furthermore, what is of still greater importance is that claim 6, as drawn, specifies also "springs tending to retain the inductor and shaft in normal position." Weber does not show this structure, but it is one of the characteristic features of applicant's construction, and also that of Milton, because there are springs connected to each of the two branches of the yoke, constantly under tension, or under tension at all times, and tending to retain the yoke and the inductor and the shaft carrying the same, in normal position.

If we look at the Weber construction, we see that he does not have springs tending to hold the arm 40 and the inductor and its shaft in normal position, but he has a single spring 50 coiled around the reciprocating rod 39. This spring 50 must serve the double function of a compression and tension spring, being alternately under tension and compression. This is one of the disadvantages of the Weber construction, as no spring will be entirely satisfactory which must be subjected to alternate compression and tension strains. It is well known that a spring under such conditions is more apt to crystallize and break when subjected to alternate tension and compression strains than when subjected to only one character of strain or work.

For these reasons, it is thought that claim 6 distinguishes the Milton and applicant's constructions over that of Weber, and allowance of the claim to applicant is requested.

Applicant has noted the Examiner's reference to the Pod-

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lesak patents, No. 1,098,052 and 1,055,076. Applicant also notes that the patent No. 1,055,076 was re-issued as Re-issue No. 13,878, of February 9, 1915. A careful consideration of the claims of the re-issue patent would indicate that claims 13 to 15, inclusive, and claims 19 to 24, inclusive, read equally as well upon applicant's structure as upon the structure shown in the Podlesak patent. As applicant's original application, of which the present application is a division, was filed long prior to the filing date of the original, applicant has incorporated these claims in the present amendment, and asks that they be entered, and that an Interference with Podlesak, as well as with Milton, be declared as soon as practicable.

Respectfully submitted,

BROWN NISSEN & SPRINKLE,

Attorneys for Applicant.

Chicago, Illinois,

April 14, 1915.

2097

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(Rubber stamps) Mail Room May 10 1915 U. S. Patent Office U. S. Patent Office, May 11 1915 Division XXVIII.

IN THE UNITED STATES PATENT OFFICE.

Division 28, Room 63,
Edmund Joseph Kane,
Electric Igniter,
Filed January 14, 1915,
Serial No. 2097.
The Commissioner of Patents,
Washington, D. C.

Sir:

> Supplementing my amendment of April 14, 1915, I am enclosing a supplemental oath referring to the claims in this case.

Respectfully submitted,

EDMUND JOSEPH KANE
By BROWN NISSEN & SPRINKLE
Attorneys.

Chicago, Illinois,
May 8, 1915.

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IN THE UNITED STATES PATENT OFFICE.

(Rubber stamps) Mail Room May 10 1915 U. S. Patent
Office U. S. Patent Office, May 11 1915 Division XXVIII.
Div. 28, Room 63,
Edmund Joseph Kane,
Electric Igniter,
Filed January 14, 1915.
Serial No. 2097.

SUPPLEMENTAL OATH.

State of Illinois, }
County of Cook, } ss.

EDMUND JOSEPH KANE, the applicant of the application for Letters Patent above identified, being duly sworn, deposes and says that the subject-matter of the fifteen claims now in this application which includes the six original claims and the nine claims numbered 7 to 15 inclusive, submitted in his amendment dated April 14, 1915, and responsive to Office action of March 24, 1915, was part of his invention, was invented before February 2, 1910, the filing date of his original application, Serial No. 541,428, of which the above identified application is a division, was not known or used before his invention, was not patented or described in a printed publication in any country more than two years before February 2, 1910, was not patented in a foreign country on an application filed more than twelve months before February 2, 1910, was not in public use or on sale in this country more than two years before the date of his said original application, and has not been abandoned.

EDMUND JOSEPH KANE.

Sworn to and subscribed before me this 7th day of May, 1915.

THOMAS COLSON
Notary Public.

Div 28 Room 63

Paper No. 5

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

All communications respecting this application should give the serial number, date of filing, title of invention, and name of the applicant.

RYH

(Rubber stamp) U. S. Patent Office Aug 6 1915 Mailed.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

Aug. 6, 1915.

Brown, Nissen & Sprinkle,
312 So. Dearborn St.,
Chicago, Ill.

Edmund Joseph Kane, S. No. 2097, filed Jan. 14, 1915, Electric Igniters.

Case considered as amended April 17, 1915.

An interference will be declared between applicant and patent to Milton, 1,096,048, granted May 12, 1914, on claims 1 to 6 of applicant.

Claims 7 to 15, inclusive, which were made by applicant for the purpose of obtaining an interference with Podlesak, are rejected as lacking foundation. It is noted in this respect that each of the claims 7 to 15 includes in various terms "an arm on the rotor, an arm on said movable electrode adapted to engage with the first mentioned arm, and spring means for holding said arms in engagement".

It will be noted from applicant's statement respecting the mode of operation of his device that in his structure these arms are not normally in contact, being only in contact when the magneto rotor is carried past the normal position on the return stroke by inertia. See lines 14 and 15, page 4 of applicant's specification.

Applicant's make-and-break contacts are therefore normally in contact and open upon the return stroke of the magneto.

In Podlesak, it will be noted that the arms being in normal contact, his make-and-break contacts are normally operated

are only closed momentarily when the rotor reaches the end of its motion just prior to release.

In last line, page 3 of applicant's specification, "closed" should read close.

BENSON
Examiner.

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Forwarded from Div. 28
Examiner of Interferences.

Paper No. 6
[Interference.]

DEPARTMENT OF THE INTERIOR,
United States Patent Office,
Washington, D. C.

Aug. 17, 1915.

(Rubber stamp) U. S. Patent Office, Interference Division
Aug 24 1915 Mailed

Brown Nissen & Sprinkle,
312 So. Dearborn St.,
Chicago, Ill.

Please find below a copy of a communication from the Examiner concerning the application of Edmund Joseph Kane, S. No. 2097, filed Jan. 14, 1915,—Electric Igniters.

Very respectfully,

THOMAS EWING
Commissioner of Patents.

Room No.

Address only

The Commissioner of Patents

Washington, D. C.

39013

The case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the Rules.

The statement demanded by Rule 110 must be sealed up and filed on or before Sep 27 1915 with the subject of the in-

vention, and name of party filing it, indorsed on the envelope. The subject-matter involved in the interference is

Count 1. In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

Count 2. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating mem-

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(Kane, 2097).

bers to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with the yoke, and reciprocating mechanism driven by

the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

Count 3. In a device of the class described, the combination of a field magnet, an inductor for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

Count 4. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

Count 5. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and an impact member fixed relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

Count 6. In a device of the class described, a field magnet,

a shaft, an inductor mounted upon the shaft for oscillation relative to the field magnet, a yoke mounted upon said shaft

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(3)—

(Kane, 2097).

for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an ignition spark in the combustion of the engine.

The interference involves your application above identified and

A patent (No. 1,096,048, May 12, 1914) for Magneto-Generator granted to John Lewis Milton, whose postoffice address is c/o Webster Electric Company, Tiffin, Ohio, and whose attorney is Lynn A. Wililams, Monadnock Block, Chicago, Ill.

The relation of the counts of the interference to the claims of the respective parties is as follows:

| Counts: | Kane: | Milton: |
|---------|-------|---------|
| 1 | 1 | 1 |
| 2 | 2 | 2 |
| 3 | 3 | 3 |
| 4 | 4 | 4 |
| 5 | 5 | 5 |
| 6 | 6 | 6 |

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A R BENSON

Examiner.

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2-079

INTERFERENCE.

Interference No. 39013

Paper No. 7

Name, Edmund Joseph Kane

Serial No. 2097

Title, Electric Igniters

Filed, Jan. 14, 1915

Interference with John Lewis Milton (Patent)

Decisions of

Primary Examiner,

Dated,

Favorable—March 30/17 vacated * (*Sept. 6/16*) Sept. 29/16.

Ex'r of Interferences, * (*Adverse*)

Dated

Board,

Dated

Commissioner,

Dated

Remarks:

This should be placed in each application or patent involved in interference in addition to the interference letters by Primary Examiner.

2097

27

*Matter in italics in parentheses, stricken out in original transcript.

936 (Rubber stamps) Mail Room Aug 26 1915 U. S. Patent Office U. S. Patent Office Aug 27 1915 Division XXVIII.

IN THE UNITED STATES PATENT OFFICE.

Division 28, Room 63,
Edward Joseph Kane,
Electric Igniters,
Filed Jan. 14, 1915,
Serial No. 2,097.
The Commissioner of Patents,
Washington, D. C.

*(Sir:—

This communication is in response to the official letter of August 6, 1915.

Page 3 of applicant's specification, in last line, change "closed" to close.

not entered

Remarks.

Applicant notes that the Examiner will, in due course, declare an interference between applicant and the patent to Milton, Patent No. 1,096,048, granted May 12, 1914, on claims 1 to 6 of the applicant.

The Examiner's attention is called to the fact that the patentee Milton was an employee of the Webster Electric Company, which is the party in interest in the Podlesak patent also. It is believed that the records of the Patent Office, Assignment Division, will also show that the Milton patent is assigned to the Webster Electric Company, and that the same records will show that the Webster Electric Company is the party in interest in the Podlesak re-issue.)

2097

28

937 The Examiner's attention is called to the enclosed circular put out by the Webster Electric Company, in which there is a cut on the inside of the first page containing the notice "Podlesak Patents," thus showing that the company which owns or controls the Milton patent is also the chief party in interest in the Podlesak patent. This being the case, the Examiner will see that the applicant would pre-

*Matter in italics in parentheses, stricken out in original transcript.

fer to determine definitely the question of the interference with Podlesak before the interference is formally declared between applicant and the patent to Milton. If further evidence is required by the Examiner, tending to show that the same parties are interested in both of these patents as opposed to the interests of applicant, such evidence will be given in the form of affidavits upon request, and it is hoped that the office will, for the reasons given, delay the declaration of interference between applicant and Milton until the question of the declaration of the Podlesak interference be determined.

The applicant and his attorneys have most carefully considered the Examiner's reasons as set forth in the letter of August 6th, in which the Examiner has rejected the claims made by applicant for the purpose of obtaining an interference with Podlesak, on the ground of "lacking foundation." Applicant is in entire accord with the Examiner with respect to the slight difference in the suggested mode of operation of applicant's device, and the suggested mode of operating the Podlesak device as set forth in the Podlesak specification, but applicant is likewise astounded that the Examiner should reject his claims made for the purpose of securing the inter-

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29

938 ference with Podlesak on the ground that there is a slight difference in operation, when the facts are in the first place that, structurally, Podlesak and applicant are identical. All it is necessary to do with the Podlesak device as shown and described in his patent to make it operate, just as applicant has described the preferred mode of operating his device, is to adjust the anvil or screw 35, which is shown threaded and adjustable in the arm 32, until points 3 and 4 of Podlesak (see Fig. 2) come together. Such an adjustment may cause the anvil 35 to be separated from the arm 31 of Podlesak during the period when the rotor is at rest, just as applicant has described the preferred adjustment and manner of operating his device. Now on the other hand, all that to make it operate like Podlesak, it is necessary to do with applicant's device ^Λ is to adjust the anvil or screw 29 downwardly toward the arm 30 until contact takes place when the rotor is in a state of rest, and since the spring 28 controlling applicant's movable electrode is of less resisting power than the springs of the rotor, obviously the effect of such an adjustment will be to separate the points

10 and 26 just as Podlesak states in his patent he prefers to operate his device. Now as a matter of fact, it matters not just how this anvil is adjusted, and the Kane specification states that it is intentionally made adjustable. On typewritten page 3, beginning at about line 15, it is stated that the anvil 29 is threaded, and "is adjustably mounted on the free end of arm 27, so that timing of the engine may be varied slightly by such adjustments." Of course the applicant did not go ahead and state that, by screwing this anvil down somewhat nearer the limit of its adjustment, he could cause the electrodes to remain out of contact when the rotor is in

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939 a normal position, if such a thing was desirable, and he supposed that anyone would know enough to do this when he had provided such an adjustment. The facts are that applicant does not prefer to have his device adjusted so that the points will remain normally separated, and in this connection we would call the Examiner's attention to the fact that it appears that even Podlesak himself does not desire to have the anvil of his device so adjusted that the electrodes will remain separated when the rotor is at rest. As proof of this, applicant calls the Examiner's attention to the enclosed circular of the Webster Electric Company, which controls the Podlesak patents and manufactures under them, as will be seen by the notice on the cut on the inside of this circular, and as stated on the third page of the circular where we have underlined it in ink. On the third page of this circular the Examiner's attention is called to the paragraph we have designated by the reference character "Z," as follows: "Igniter points which remain closed at all times except when spark is made, preventing moisture by particles of carbon collecting on them. Hammer blow in opening the points, which gives greatest spark efficiency."

Now the applicant has carefully examined the Podlesak claims, and cannot agree with the Examiner that claims 13 to 15 inclusive, and claims 19 to 24 inclusive, which applicant has made in his case as Nos. 7 to 15 inclusive, are limited to any such feature as the Examiner would imply from the language in the last letter.

Applicant contends that he was the prior inventor of this structure, and he will offer proof of this when the opportun-

ity presents itself, and will attempt to show that he made this

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940 invention years prior to the filing of the first Podlesak application upon which this re-issue was based, and that Podlesak was in the employ of the Webster Electric Company, where applicant made his invention, and that Podlesak knew of this invention because it was communicated to him by applicant. Under these circumstances, therefore, it will be seen that if applicant is denied making these claims on his prior structure, he will be put in the position of having Podlesak later contend that applicant's structure is an infringement of these claims of Podlesak. Applicant has, with his counsel, carefully considered these claims, and is advised by counsel that these claims 7 to 15 inclusive which he has made, do, in fact, read upon his structure. In other words, applicant contends, and is advised by his counsel, that it is not necessary that his anvil shall be adjusted to the position of the anvil shown in the Podlesak patent in order that his structure may be responsive to these claims. Taking up the claims seriatim, it will be seen that every element of claim 7 (Podlesak 13) [^] combined

lesak 13) [^] and co-operating for the purposes set forth in the claim, is found in applicant's construction. The "relatively fixed and movable electrodes" 3 and 4 of Podlesak are responded to by the fixed and movable electrodes 10 and 26 of applicant. "An arm on the movable electrode," which is the arm 32 of Podlesak, is the arm 27 of applicant. "A generator having a rotor" is found in the rotor 17 of applicant, which functions exactly as the rotor 20 of Podlesak. "An arm connected therewith," which is the arm 31 of Podlesak, is the arm 30 of applicant. "Spring means tending to hold the motor in a given position," which is Podlesak 23, is responded by

to [^] either spring 31 or 32 of applicant. "Spring means of

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941 less tension than the first mentioned means and operating on the first mentioned arm to hold the same in engagement with the second mentioned arm," [^] which tends to draw the arm 32 of Podlesak toward the arm 31 attached to

is spring 33

and
the rotor, ^Λ is found in applicant's construction in spring 28, which normally presses the arm 27 toward arm 30, rigidly secured to the rotor. This would seem to be the only element upon which there could be the slightest quibble, and surely the Examiner does not mean to contend that the spring 28 of applicant does not hold the arm 27, and its anvil thereon, in engagement with the arm 30 which moves with applicant's rotor. It is true that applicant shows the anvil so adjusted that there is a slight gap between the arm 30 and the anvil of the arm 27 when the rotor is perfectly at rest, but the language of claim 7, corresponding to claim 13 of the Podelsak patent, is not limited to a construction in which the arm of the movable electrode is held in contact with the arm on the rotor all the time. It will certainly be sufficient to meet the terms of this claim if this spring functions so as to hold the arm on the movable electrode in engagement with the rotor at any time. Let the Examiner stop and think for a moment what is the function of this light spring 28. Is it not to rotate the movable electrode, and cause the arm 27 to be resiliently sustained and resiliently supported in the direction of the strike arm 30 of the rotor? Insofar as this claim is concerned, it is immaterial whether the points of the electrode rest together when the rotor is at rest, and so resist the action of the comparatively weak spring, or whether the parts be so adjusted as Podlesak shows them in Fig. 3 of the drawing of his re-issue patent, and the arm of the movable elec-

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942 trode contact with the arm on the rotor before the points come together, thus holding the points normally slightly separated at the time that the rotor is at rest.

The Examiner's attention is called to the fact that, electrically speaking, there is no difference in the operation of these devices, whether the anvils or screws be adjusted so that the gap is between the points of the electrodes when the rotor is at rest, as Podlesak indicates the adjustment in his re-issue patent, or whether the anvils be adjusted so that the gap will take place between the strike arm on the rotor and the anvil on the arm of the movable electrode with the points in contact when the rotor is at rest. It is submitted that it is incorrect for the Examiner to infer that Podlesak's claims

are limited to the adjustment that he shows of his parts with the arms "in normal contact." If there is any such limitation as this in claim 13 of Podlesak, which is claim 7 of applicant, the Examiner is respectfully asked to point it out. Finally in considering claims 7 to 13, the Examiner's attention is called to the fact that the element called a trip device, for actuating the rotor, is found in applicant's device just as in Podlesak's and as to this element it is believed there is no dispute.

It is not thought necessary to take up the remainder of the claims in detail, except to say that the only possible element of claim 8, which is claim 14 of the Podlesak patent, about which there can be any contention by the Examiner, is the element "spring means of less tension than the first mentioned means and operating on the first mentioned arm to hold the same in engagement with the second mentioned

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943 arm." Analyzing this element, it will be seen that applicant's spring 28 is the weaker spring of the two sets of springs, and it operates on the movable electrode arm to hold the same in engagement with the second mentioned arm. The Examiner cannot deny this, because as soon as the trip device operated by the engine, moves the arm on the rotor against the action of the rotor controlling springs, the rotor will return when released, and regardless of how the anvil or screw may be adjusted, the parts will be in contact, and the light spring on the movable electrode will hold the parts in engagement during the rebound or return of the rotor. In this respect the Kane device responds completely to the language of this claim 8, as it does to claim 7, because there is not a word said in the claim that would tend to limit the time that this engagement is to take place, and since it is a positive engagement between the two parts during the return movement of the rotor, it is thought there can be no question but that this claim reads as well upon applicant's device as upon the device of the Podlesak patent, which latter is, in fact, applicant's device.

As supporting applicant's contention, the Examiner's attention is called to claim 15 of the Podlesak patent, applicant's claim 9, which, it is understood, the Examiner has also rejected. The language of the element of this claim under consideration is: "a spring tending to hold the arm of the

electrode into engagement with the arm of the rotor." Surely the Examiner will not contend that the light spring on the movable electrode of Kane does not "tend" to hold the arm of the electrode into engagement with the arm of the rotor, although there may be part of the time that this tendency does not cause the complete engagement of the parts. It is sub-

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944 mitted that the language of this claim is satisfied when this tendency is sufficient to bring the parts into engagement during a portion of the movement of the parts. In fact, applicant will go even further, and states that it is believed his construction would satisfy the language of this claim even though the arm on the rotor and the arm on the movable electrode never touched each other, if the parts could be so adjusted as to be operated in this way, which, of course, is an absurdity, but no more absurd than the Examiner's position appears to the applicant in holding that these claims have no foundation in applicant's disclosure.

Referring to claim 19, which is claim 10 of applicant, the element "spring means of less tension than the first mentioned means, operating on the first mentioned arm to hold the same in engagement with the second mentioned arm" is certainly found in the relatively weak spring 28 of applicant, which unmistakably holds the electrode arm in engagement with the arm on the rotor during the return movement of the rotor, or at least, during a considerable portion of that movement. This spring holds the parts together as they move together to separate the points of the electrode, and prevent the too rapid separation of the electrodes; and also this spring insures the return of the electrodes together upon the release of the arm on the rotor. It is not thought necessary to quote more than a small portion of this same language applicant's No. 11,

found in claim 20, [^] referring to this same "spring means operating on the first mentioned arm to hold the same in engagement with the second mentioned arm." This is believed to be as completely responsive to applicant's construction as to the construction of Podlesak for the reasons stated.

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36

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applicant's claim 12,

The Examiner will notice that claim 21, [^] referring to the spring, uses also the word "tending," and for reasons already stated in connection with the discussion of claim 15, it is submitted this claim should be indicated as allowable to applicant. Claims 22 and 23 of Podlesak, applicant's claims 13 and 14, both contain the language: "an arm on said movable electrode adapted to engage with the first mentioned arm." Of course this is found in applicant's device just as in the Podlesak device, because applicant's electrode arm is as much adapted to engage the arm on the rotor as is Podlesak's. In fact, that is the purpose for which it was designed, just as Podlesak's arm was designed for that purpose. Claim 13 has the element: "spring means for bringing the said two arms into engagement," and this is the light spring which brings the arm of the movable electrode normally to a position, and holds it in that position where the arm on the rotor can engage it; and furthermore, this light spring on the movable electrode holds the arm thereon in engagement with the arm on the rotor during the combined return or rebound movement of the rotor arm, thus showing conclusively that this spring is the means for bringing the two arms into engagement regardless of how the anvil or screw may be ad-

Podlesak 23,

used. The language of claim 14 [^] in this respect is identical with the language of claim 13, and the language of claim Podlesak 24,

15 [^] in this respect is similar.

Reconsideration and allowance of these claims of applicant is requested.

If the Examiner has any difficulty in understanding the mode of operation of applicant's device as explained in connection with the claims above discussed, or if the Examiner is

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946 unable to agree to the fullest extent with applicant's position in this matter, applicant requests that the Examiner accord him an opportunity to appear in his presence with his attorney for a hearing in regard to this matter, when a model or full-sized device of the Kane magneto may be produced and operated, and compared with the structure of the Podlesak patent, which latter may also be presented in the

form of a model or full-sized device if the Examiner so desires.

Respectfully submitted,

BROWN NISSEN & SPRINKLE

Attorneys for Applicant.

Chicago, Illinois,
August 23, 1915.

2097

38

The Wonderful New Type "K"



THE WEBSTER TYPE "K" magneto is of the oscillating type and embodies the same principle as other WEBSTER MAGNETOS. However, it differs in construction and is also considerably smaller. This machine was designed especially for engines of one, two and three horse-power. The WEBSTER MAGNETO is an innovation in magneto field in view of the fact that it is sold complete with magnets ready to put on the engine. This feature in the smaller Type "K", will be a big help to engine manufacturers, their agents, dealers and the ultimate purchaser. It might be said here that Webster Company is the only concern which can furnish a complete ion outfit ready to put on an engine.

WEBSTER MAGNETOS are reasonable in price, especially Type "K", was produced so that manufacturers who find it necessary to equip smaller engines with magnetos can do so and have the very best on apparatus.

WEBSTER Type "K" was made possible by the use of the new patents, the main principle being a tripolar arranged field with a pole inductor. With this construction very little motion is necessary to operate the magneto so as to obtain an extremely hot spark. Brushes, moving wires or collector rings are used, so that the machine

is thoroughly water, weather and oil proof. This in itself assures the operator of the engine that he will have a spark under all conditions. Although these features are the leading ones covered by the Podleski patents, there are numerous others which aid toward the easy handling of an engine.

SPECIFICATIONS:

MAGNETS are of the highest grade Tungsten steel and made in the Webster factory. SHAFT is one piece, 1/2 inch diameter, and ground to size.

INDUCTOR is made of laminated special alloyed steel and riveted electrically. It is keyed up the shaft by a Washdruff key and cannot possibly shift.

POLE PIECES are made of laminated special electric steel and riveted electrically. BEARINGS are bronze and lubricated by capillary attraction.

SPIDERS are of bronze. PUSH FINGER and SPRING ARM drop forged tool steel.

COILS are stationary and are wound of cotton and enamel insulated wire and after being thoroughly processed in insulating varnish are taped and processed again before putting into the machine.

PLUG: By years of experience the Webster Company have proven to the world that mounting the magneto on a bracket which is a part of the igniter plug is the best and

simplest practice. The WEBSTER plug is thoroughly covered by patents and we find herewith some of its features:

Three point suspension which allows for the removing and replacing of the plug without changing the timing of the magneto on the engine.

Lightest points which remain closed all types of shocks, moisture or particles of carbon collecting upon them.

Hammer blow in opening the points which gives greatest spark efficiency.

Positive coil spring which makes it extremely difficult for the movable electrode to stick.

The WEBSTER MAGNETO can be truthfully called the "Crankless Engine Starter" and is equipped with a starting lever which is used to trip the magneto by hand. This feature is used on all types of the WEBSTER line.

WEBSTER MAGNETOS have no moving wires, brushes or rubbing contacts and are not affected by oil or water.

The Webster Electric Co., Racine, Wisconsin, U. S. A.



947
948 (Rubber stamps) Mail Room Aug 26 1915 U. S. Pat-
ent Office U. S. Patent Office, Aug 27 1915 Division
XXVIII.

The Webster Electric Company

Racine, Wisconsin

U. S. A.

Webster
—Tripolar—
Magneto
Crankless
Starter

July
Nineteen
Fourteen

Dear Sir:

On the following pages we take pleasure in presenting to
you information about Webster Magnetos, principally, how-
ever, type "K".

If you will spend three minutes reading it, we believe you
will find that it completely solves your ignition problem.

Yours truly,

THE WEBSTER ELECTRIC CO.

By S A LOEB

Vice Pres.

2097
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949

Serial No. 7097 Paper No. 9.
Doc

(Rubber stamps) Mail Room Sep 6 1915 U. S. Patent Office
Docket Clerk Sep 8 1915 U. S. Patent Office

IN THE UNITED STATES PATENT OFFICE.

Re Application of
Edmund Joseph Kane,
Electric Igniters,
Filed January 14, 1915,
Serial No. 2,097. } Before the
Commissioner.

In view of the report of the Exr dated Sep 8 1915 the peti-
tion is Denied Sep 15 1915

THOMAS EWING
Commissioner of Patents.

PETITION.

To the Commissioner of Patents:

Your petitioner, the applicant in the above entitled application, avers—

First, that on or about August 24, 1915, claims 1-6 inclusive of this application were placed in interference with the patent No. 1,096,048, dated May 12, 1914, for Magneto-Generator, granted to John Lewis Milton, interference No. 39,013.

Second, that the Examiner of Interferences ruled that the statements * (*in*) Rule 110 in this case must be filed on or before September 27, 1915.

Third, that claims 7-15 inclusive of said application are still being prosecuted before the Examiner of Division 28, with a view of placing said claims 7-15 in interference with re-issue patent No. 13,878 for Current Generator and Igniters for Internal Combustion Engines, granted to Emil Podlesak.

Fourth, that the real party in interest in the Milton patent No. 1,096,048, and the real party in interest in the Podlesak re-issue patent No. 13,878, are one and the same party; namely, The Webster Electric Company, having offices

2097

41

950 and factories at Tiffin, Ohio, and Racine, Wisconsin.

Fifth, that if said Milton is given access to applicant's file wrapper and contents before claims 7-15 inclusive in said application are placed in interference with said Podlesak patent or otherwise disposed of, and an interference is declared later between said claims 7-15 and said Podlesak's re-issue patent, the party controlling the Podlesak patent, The Webster Electric Company, will be given access to the file wrapper and contents of applicant before said Podlesak files his statement under Rule 110, thereby defeating Rule 111, and exposing the filing date of applicant's original application, Serial No. 514,428, filed February 2, 1910, of which the above mentioned application is a division, to Podlesak before said Podlesak is entitled to it, to applicant's great injury.

Wherefore your petitioner requests—

First, that the time for filing the statement under Rule

*Matter in italics in parentheses, stricken out in original transcript.

110, and opening of Kane's file wrapper and contents to Milton in interference No. 39,013, between Kane and Milton, be extended from month to month until claims 7-15 inclusive of the application above mentioned have been placed in interference with said Podlesak patent or otherwise disposed of, for the reasons mentioned.

Second, that the Examiner of Division 28 be instructed to act as promptly as possible on said claims 7-15 of the above mentioned application, in order to prevent unnecessary delay in the prosecution of interference No. 39,013 between Kane and Milton.

Oral hearing of this petition is hereby waived.

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Remarks.

It is not the purpose of this petition to delay the prosecution of interference No. 39,013 between Kane and Milton, but it is the purpose to facilitate the prosecution of claims 7-15 of applicant's application Serial No. 2,097, filed January 14, 1915, so that said claims will either be placed in interference with said Podlesak re-issue patent, or otherwise disposed of before applicant's record will be opened to said Milton, for the reason that Milton has licensed The Webster Electric Company, of Tiffin, Ohio, and Racine, Wisconsin, to manufacture Electric Generators under his patent, and that said Podlesak has also licensed said The Webster Electric Company to manufacture Electric Igniters under his patent. It is therefore obvious that, if applicant's record is thrown open to Milton, Podlesak will be apprised of applicant's original filing date before he is entitled to the same.

Soon after the time that applicant made his invention set forth in the above referred to application, he disclosed the same to John L. Milton, the patentee Milton above referred to, and Emil Podlesak, the patentee Podlesak above referred to, who were in the employ of The Webster Electric Company in the Experimental Department thereof. At that time The Webster Electric Company was not interested in this invention, for the reason that there was no demand yet for such Electric Igniters. After applicant had made a number of his Igniters, and showed the advantages thereof, said Milton ap-

*Matter in Italics in parentheses, stricken out in original transcript.

plied for his patent, and licensed The Webster Electric Company to manufacture said Electric Igniters. Then later Podlesak made application for his patent, and also licensed The Webster Electric Company to manufacture under his patent.

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952 As evidence that The Webster Electric Company is manufacturing under both of these above mentioned patents, applicant is herewith submitting a catalogue published by The Webster Electric Company, entitled "Webster-Milton Low Tension Magneto." In this catalogue is shown a number of views which show applicant's construction very clearly. This catalogue also refers to the Milton patents. Applicant is also enclosing a catalogue published by The Webster Electric Company, entitled "Webster Magnetos." On the front cover of this catalogue is the picture of a Magneto with the words "Podlesak Patents, Simplest" indicated on the picture of the Magnetos. In this catalogue a number of references are made to the Podlesak patents, both on the cuts and in the reading matter. These catalogues show that The Webster Electric Company is the real party in interest in both of these patents, and it is urged that it would not be fair to Kane to have his record exposed to said The Webster Electric Company before an interference was declared between claims 7-15 of this case and the Podlesak patent above referred to, if applicant is entitled to such a declaration of interference on his record. It is therefore urged that Milton be not allowed to see applicant's file wrapper and contents until it is determined whether or not an interference will be declared between applicant's claims 7-15 in the above application and the re-issue patent of Podlesak above mentioned.

To strengthen the contention that both Podlesak and Milton have licensed The Webster Electric Company, an affidavit of your petitioner will be forwarded within a few days, and before this case is reached for action, enumerating such facts as will show the above.

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953 Your petitioner is forwarding in this same mail a stipulation signed by the counsel for Kane and counsel for Milton, stipulating an extension of ten (10 days) for filing the statement under Rule 110 in interference No. 39,013. Your

petitioner will use every endeavor to co-operate in obtaining a disposal of claims 7-15 of his application, either by having these claims placed in interference with Podlesak or otherwise finally disposed of, in order to facilitate the prosecution of the questions in issue.

Respectfully submitted,

BROWN NISSEN & SPRINKLE

Attorneys for Kane.

Chicago, Illinois,

Sept. 1, 1915.

2097

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Serial No. 7097 Paper No. 10

Doc

(Rubber stamps) Docket Clerk Sep 7 1915 U. S. Patent
Office Mail Room Sep 7 1915 U. S. Patent Office

IN THE UNITED STATES PATENT OFFICE.

| | | |
|--|---|--|
| Re Application of Edmund Joseph Kane, Electric Igniters, Filed January 14, 1915, Serial No. 2,097. | } | Before the Commissioner on Petition. |
|--|---|--|

AFFIDAVIT.

EDMUND JOSEPH KANE, the applicant in the above entitled application, being duly sworn, deposes and says that he is informed and believes that The Webster Electric Company, having offices and factories at Tiffin, Ohio, and Racine, Wisconsin, and formerly having a factory and office at Chicago, Illinois, is manufacturing and selling Electric Igniters embodying his invention as disclosed in his application above referred to; that he is informed and believes that said The Webster Electric Company is manufacturing and selling said Electric Igniters under licenses given it by John L. Milton under U. S. Letters Patent No. 1,096,048, and Emil Podlesak under re-issue patent No. 13,878; that he has seen and examined Magneto Generators manufactured by The Webster Electric Company, which bore markings thereon purporting to give notice that such Magneto Generators were made and sold in accordance with said Milton patent, and *(that) other Mag-

neto Generators manufactured by The Webster Electric Company, which bore markings thereon purporting to give notice that such Magneto Generators were made in accordance with said Podlesak patent, all of which Magneto Generators embodied applicant's invention as disclosed in his application above mentioned; and that he disclosed his invention as set forth in the above entitled application to both John L. Milton and Emil Podlesak, the above named patentees, long before either Milton or Podlesak made application for their above mentioned patents, and while said Milton and Podlesak were in the employment of The Webster Electric Company, in the Experimental Department thereof, in an endeavor to interest The Webster Electric Company in affiant's invention.

EDMUND JOSEPH KANE.

Sworn to and subscribed before me this 3rd day of September, 1915.

R. J. MADILL,
Notary Public.

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My Commission Expires November 8th, 1917.

46

955 Address only
The Commissioner of Patents,
Washington, D. C.

Letter No. 11 &
12

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

In re application of
Edmund Joseph Kane,
Serial Number 2097,
Filed Jan. 14, 1915,
Electric Igniters.
Hon. Commissioner of Patents,
Sir:

September 8, 1915.

Claims 7 to 15 of this application, which are identical with certain claims in Reissue Patent 13,878 to E. Podlesak, have been rejected on the ground that they lack foundation in this application as filed.

The structure disclosed in this application, by giving a sufficient range of adjustment to the "anvil 29" and by properly proportioning the spring 28 relative to springs 31 and 32, can be made to support the said claims. The specification, how-

ever, does not disclose to what extent the "anvil" is adjustable; nor does it disclose the fact that the spring 28 is of less tension than springs 31 and 32. Since the application does not afford sufficient foundation for the claims in question, I think the proposed interference should not be declared.

Respectfully,

A. R. BENSON
Examiner.

Div. 28,
Room 36.
2097
47

956 Address only
The Commissioner of Patents
Washington, D. C. LJB

Letter No. 13

DEPARTMENT OF THE INTERIOR
United States Patent Office
Washington

September 16, 1915.

In the matter of the
Application of
Edmund Joseph Kane,
Electric Igniters;
Filed Jan. 14, 1915,
Serial No. 2,097, } Petition.

Sir:

You are hereby informed that the decision of the Commissioner on the above petition is as follows:

In view of the report of the Examiner, dated September 8, 1915, the petition is Denied Sep 15 1915

THOMAS EWING
Commissioner of Patents.

Enclosed herewith please find a copy of the Examiner's report.

By direction of the Commissioner:
Very respectfully,

Chief Clerk.
F.

Edmund Joseph Kane,
c/o Brown, Nissen & Sprinkle,
312 S. Dearborn Street,
Chicago, Ill.

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V

(Rubber stamps) Mail Room Sep 20 1915 U. S. Patent Office
U. S. Patent Office, Sep 21 1915 Division XXVIII.

IN THE UNITED STATES PATENT OFFICE.

Division 28, Room 63,
Edmund Joseph Kane,
Electric Igniters,
Filed January 14, 1915,
Serial No. 2097.

**(The Commissioner of Patents,
Washington, D. C.*

Sir:—

The above entitled application is amended as follows:—

Not entered *In the description, Page 4, line 14, cancel "and", first occurrence. Line 16, before "This", insert—Spring 28 is of less tension than springs 31 and 32, as clearly indicated in Fig. 2, so that contact 26 will be moved away from contact 10 against the influence of spring 28 by member 30 on the return movement of the latter given it by springs 31 and 32 as above mentioned.*

Same page, between lines 24 and 25, insert—

In some instances it is desirable to adjust the parts so that the contact 26 is normally out of engagement with contact 10. To make such an adjustment the anvil 29 is adjusted toward member 30 until arm 27 and contact member 26 are moved to separate contact 26 from contact 10. Since spring 28 is of less tension than springs 31 and 32, the latter springs will resist the force exerted by spring 28 on arm 27 and prevent contact 26 from engaging contact 10 while said parts are at rest or in their normal condition. This adjustment of said parts is not shown in the drawing since

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it will be apparent from the adjustment shown, see particularly Fig. 2. When adjusted as just

**Matter in italics in parentheses, stricken out in original transcript.*

referred to, spring 28 will move contact 26 into engagement with contact 10 as soon as plunger 36 moves arm 35 and member 30 a short distance. The contacts will be held together by spring 28 until member 30 returns and engages anvil 29 of arm 27 to separate the contacts for forming a spark in the same manner as the first-mentioned the adjustment of Δ parts.)

Remarks.

This application has been amended to overcome the objection made by the Examiner in his report of Sept. 8, 1915 to the Commissioner of Patents, on Petition. It is thought that this amendment will overcome said objections and provide sufficient foundation for claims 7 to 15 inclusive.

It is noted that in the description as originally filed, it is not specifically stated that spring 28 is of less tension than springs 31 and 32, but in the drawing spring 28 is shown as being made of considerably smaller material than either one of springs 31 and 32. Furthermore, in applicant's original application, Ser. No. 541,428, filed Feb. 2, 1910, of which the present case is a division, a description of the action of springs 28, 31 and 32 and their connecting parts is given on page 9 in lines 13 to 25 inclusive. In this original description it is not specifically stated that the spring 28 is of less tension than springs 31 and 32, but it states that member 30 is returned against the influence of spring 28. Since inertia is produced in member 30 by the action of springs 31 and 32, and such inertia causes spring 28 to yield to open the con-

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959 facts, it necessarily follows that spring 28 must be of less tension than springs 31 and 32. It is therefore thought that this idea is sufficiently disclosed in the original description to merit the specific statement now presented in this amendment relative to the tensions of said springs.

The adjustment referred to in the second paragraph of the amendatory matter of this amendment, does not require formation of any of the parts different from that already shown. This adjustment simply consists in turning the anvil 29 in its

*Matter in italics in parentheses, stricken out in original transcript.

threaded connection of arm 27 until the lower end of the envil moves arm 27 and the shaft portion of member 26 to disengage the contact portion of member 26. It is an elementary proposition that applicant is entitled to such adjustments and uses as his device is capable of, and it is therefore urged that he is not setting up any new matter in the matter of the present amendment.

With the adjustment of applicant's device, which is clearly set forth in the second paragraph of the amendatory matter, presented herewith, applicant's device is directly readable on present claims 7 to 15 which are claims 13 to 15 and 19 to 24 inclusive of the reissue patent No. 13,878 dated Feb. 9, 1915, of Emil Podlesak. In view of this fact, it is urged that the interference between this application and the said Podlesak patent, be declared.

It is not thought necessary to add a new figure to the drawing showing the adjustment referred to in the present amendment, since such an adjustment is perfectly obvious from the disclosure of Figs. 2 and 3.

An affidavit executed by applicant is herewith enclosed
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960 setting forth the fact that the amendatory matter of the present amendment was part of his original invention.

Respectfully submitted,

BROWN NISSEN & SPRINKLE

Attorneys for Applicant.

Chicago, Ill.

September 18, 1915.

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(Rubber stamps) Mail Room Sep 20 1915 U. S. Patent
Office U. S. Patent Office, Sep 21 1915 Division XXVIII.

IN THE UNITED STATES PATENT OFFICE.

Division 28, Room 16,
Edmund Joseph Kane,
Electric Igniters,
Filed January 14, 1915,
Serial No. 2,097

SUPPLEMENTAL OATH.

EDMUND JOSEPH KANE^s, the applicant in the above entitled application, being duly sworn, deposes and says that the subject matter of the amendment enclosed herewith and of even date with this oath, was part of his invention, was invented before he filed his original application for such invention, application Serial No. 541,428, filed Feb. 2, 1910, of which the above entitled application is a division, was not known or used before his invention, was not patented or described in a printed publication in any country more than two years before said original application, was not patented

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in a foreign country on ^ application filed more than twelve months before said application, was not in public use or on sale in this country more than two years before the date of said application, and has not been abandoned.

EDMUND JOSEPH KANE

Sworn to and subscribed before me this 18th day of September, 1915.

THOMAS COLSON
Notary Public.

(Seal)
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(Rubber stamps) Docket Clerk Oct 6 1915 U. S. Patent Office
 Mail Room Oct 8 1915 U. S. Patent Office Denied Oct 9 1915
 Thomas Ewing Commissioner of Patents.

IN THE UNITED STATES PATENT OFFICE.

| | | |
|--|---|--------------------------|
| In Re Application of Edmund Joseph Kane, Electric Igniters, Filed Jan. 14, 1915, Serial No. 2,097. | } | Before The Commissioner. |
|--|---|--------------------------|

(In left-hand margin) Recorded Vol. 118 Page 44. On the report of the Examiner of even date the petition is denied.

PETITION.

The Commissioner of Patents:

Your petitioner, the applicant in the above entitled application, avers—

First, that on September 1, 1915, he petitioned the Commissioner, requesting that the time for filing the statement under Rule 110, and opening of Kane's file wrapper and contents to Milton in interference No. 39013 between Kane and Milton, be extended from month to month until claims 7 to 15 inclusive of Kane's application might be placed in interference with Podlesak's re-issue patent No. 13878, or otherwise finally disposed of, and that the Examiner of Division 28 be instructed to act as promptly as possible on claims 7 to 15 inclusive of Kane's application in order to facilitate the prosecution of interference No. 39013, and set forth his reasons for such request.

Second, that on September 15, 1915, the Commissioner denied said petition, basing his denial on the Examiner's report dated September 8, 1915.

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963 Third, that on September 18, 1915, your petitioner amended his description to overcome the objections pointed out in said Examiner's report, and that said amend-

ment has not been acted upon by the Patent Office to the best of applicant's knowledge and belief.

Wherefore your petitioner requests that the statements under Rule 110 in the interference between Milton and Kane, No. 39,013, be kept sealed, and the file wrapper and contents of Kane's application in said interference be not exposed to the opposite party until after claims 7 to 15 inclusive of Kane's application be finally disposed of before the Primary Examiner in charge thereof.

Oral hearing on this petition is hereby waived.

Remarks.

Applicant amended his description to make it state positive features which would make claims 7 to 15 inclusive in applicant's application read as well on his application as on the Podlesak re-issue patent No. 13,878. Accompanying this amendment, in applicant's remarks he pointed out that the matter inserted by this amendment was inferentially set forth in the description and positively shown in the drawings in the original application, of which applicant's present application in said interference is a division. It is thought that this amendment will overcome any question of whether or not applicant's description discloses the subject matter of claims 7 to 15 inclusive in applicant's application in said interference.

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964 The reason of applicant's request for having claims 7 to 15 inclusive of his application finally disposed of before the statement under Rule 110 and the file wrapper and contents of his applications are open to Milton, was clearly set forth in his petition, which was dated September 1, 1915, and the sworn statement of applicant executed September 3, 1915. With this amendment were also submitted two catalogues published by the Webster Electric Company, which is manufacturing devices under licenses from said Milton and said Podlesak. It is also noted, and is a matter of record, that the attorney for Milton is the attorney for Podlesak in their patents in question. For the above reasons it is requested that Kane's file wrapper and contents and statement under Rule 110 be withheld from Milton until claims 7 to 15 inclusive of applicant's application, Serial No. 2,097, be finally disposed of, so that Podlesak, his attorney of record and the Webster Electric Company, the party of interest in

the Milton patent, may not have access to applicant's record (Podlesak)

until he [^] is entitled to same under Rule 111.

It is therefore urged that this petition be granted and such orders given as will bring about the request of this petition.

Respectfully submitted,

BROWN NISSEN & SPRINKLE,
Attorneys for Applicant.

Chicago, Illinois,

October 4, 1915.

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(Rubber stamp) Commissioner Received Oct 9 1915 of Patents.

IN THE UNITED STATES PATENT OFFICE.

In re application of
Edmund Joseph Kane,
S. No. 2097,
Filed Jan. 14, 1915,
Electric Igniters.

} Before the
Hon. Commissioner of Patents,
on Petition.

EXAMINER'S STATEMENT.

Claims 7 to 15 of the above noted application were rejected Aug. 6, 1915, on the ground that they lacked foundation in the case as filed.

On Aug. 24, an interference involving the said application was declared.

On Sept. 8, 1915, by direction of the Commissioner, the said claims were reconsidered in view of certain arguments advanced by applicant. Said reconsideration, however, failed to change the examiner's opinion on the question of foundation.

On Sept. 20, 1915, applicant presented a proposed amendment to his specification; which amendment, according to office rules, has been placed in the file wrapper of the application, but not yet entered therein.

The proposed amendment and the arguments made in connection therewith have been considered by the examiner, and he is still of the opinion that the original specification does

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966 —2— (Kane, 2097).
not afford sufficient foundation for claims 7 to 15, inclu-

sive.

ARB

Oct. 9, 1915,

Div. 28, Room 63.

Brown, Nissen & Sprinkle,

312 So. Dearborn St., Chicago, Ill.

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A. R. BENSON

Examiner.

967 290 444 17 & 18.
Address Only LJB Letter No.
The Commissioner of Patents
Washington, D. C.

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

October 11, 1915.

In the matter of the
Application of
Edmund J. Kane,
Electric Igniters;
Filed Jan. 14, 1915.
Serial No. 2,097.

PETITION.

Sir:

You are hereby informed that the decision of the Commis-
sioner on the above petition is as follows:

On the report of the Examiner of even date the petition is
Denied Oct 9 1915

THOMAS EWING

Commissioner of Patents.

By direction of the Commissioner:

Very respectfully,

Chief Clerk,
F.

Edmund J. Kane,
c/o Brown, Nissen & Sprinkle,
312 South Dearborn St.,
Chicago, Ill.

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Defendants' Exhibit No. 55.

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Letter No. 19

Address Only
The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR,
United States Patent Office
Washington

October 18, 1915.

Hon. Commissioner of Patents,
Sir:

It is requested that jurisdiction of the application of E. J. Kane, Serial Number 2097, now involved in Interference No. 39,013, be restored to the Primary Examiner for the purpose of placing the same in interference with the reissued patent No. 13,878 to E. Podlesak.

Respectfully,

A. R. BENSON
Examiner.

Div. 28,

Room 63.

(Rubber stamp) Approved Oct 18 1915 J. T. Newton First
Assistant Commissioner.

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(Rubber stamps) Mail Room Oct 18 1915 U. S. Patent
Office U. S. Patent Office Oct 18 1915 Division XXVIII.

IN THE UNITED STATES PATENT OFFICE

Div. 28, Room 63
Edmund Joseph Kane,
Electric Igniters,
Filed January 14, 1915.
Serial No. 2097.

The Commissioner of Patents,
Washington, D. C.

Sir:

Conforming to the requirements of the Examiner having this application in charge, as expressed at an oral interview, on Saturday, Oct. 16, 1915, in regard to the official letter of August 6, 1915, rejecting claims 7 to 15 inclusive as lacking foundation and as further expressed in the Examiner's Reports of Sept. 8, 1915, and Oct. 9, 1915, on Applicant's petition to The Commissioner, the Applicant requests that the Amendment dated Chicago, September 18th, 1915, be entered in the following modified form:

Page 2, following the word "on" in line 3 from the bottom, erase the remainder of the sentence in this and the following line and insert the following:

V ✓ supporting block 25 which is secured by set screw
25^a to the bearing member or bracket on or in which
the magneto generator is mounted, thus rendering
B1 the magneto generator proper, detachable from its
roman firm supporting base, shelf or bracket formed integrally with ignition block or plug 8 as described.

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61 ✓ Same page, last line, change "a" to is.

970 No. 2097—2.

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✓ Page 3, line 4, change "extension" to supporting block.

✓ Line 5, change "by a" to at the, and after "25a"

- ✓ insert or other suitable fastening means.
 ✓ Line 10 after "through", insert and beyond. Lines
 ✓ 12 and 13, change "resting on" to engaging.
 ✓ Line 22, change "contact" to contacts. Last line
 ✓ change "close" to in striking relation; and after
 numeral 29 place a comma and insert ✓ the position
 B¹¹² of the anvil varying obviously with its described
adjustment.

Page 4, line 17 after "engine" insert the following paragraphs—

B² ¶By referring to the preferred embodiment of my invention as depicted in the drawing it will be seen that the single spring 28 is, due to the manner of its connection with the movable electrode shaft and the igniter block 8, of the torsional class of springs, while the multiple springs 31, 32, acting cumulatively upon the oscillating yoke member, 30 are tension springs exerting their combined elastic resistance to tension upon yoke member 30 whenever it is oscillated from its normal position of rest. Furthermore, while torsion spring 28 is shown formed of a much smaller grade of spring wire than the multiple tension springs 31, 32, it will also be obvious that its relative tensional relation to the combined springs 31, 32 will be greatly diminished by the system of leverages disclosed in the drawings of these associated parts. For example, torsion spring 28 must exert its reaction upon anvil lever 27 at a point relatively close to the fulcrum of this lever while the combined tension of springs 31 and 32 is exerted upon the outer extremities of yoke 30, one of which

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No. 2097—3.

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parts also forms the striker and comes in direct contact with the anvil 29 on arm 27, so that there is no loss of the reacting power of this pair of springs. This multiplies the effectiveness of springs 31, 32 over the torsion spring 28 many times, with the result that in the combination of these elements shown

in the drawing the reaction of the combined rotor springs is controlling, and when the momentum of the rotor carries it over center obviously the less effectively arranged single spring 28 will yield allowing the igniter points to separate, but closing them quickly when the rebounding effect of the rotor yoke is withdrawn.

In practice, I prefer to adjust the anvil 29, which as shown in the drawings, is of an old and well known form of those skilled in this art, in relation to movable electrode arm 27 and the striking part of the yoke 30, so that when the yoke is at rest it will not influence the position of the movable electrode arm 27 with the result that normally the electrode points will be in contact, which, as well known to those skilled in this art, is desirable in keeping the contact points of the electrodes free from deposits of carbon or other substances on the interior of the engine cylinder that may interfere with the free discharge of the ignition spark between the contacts. An obvious adjustment, however, of anvil 29 to precisely close the normal gap between it and yoke 30, as shown, for example in Figs. 2 and 3, will not change the described mode of operation of the igniter points, but if the anvil be still further adjusted toward the yoke after the gap disappears, obviously the anvil 27 will rest normally in contact with the yoke and the igniter points will be nor-

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No. 2097—4.

9123

mally separated by the increased leverage of springs 31, 32 over spring 28, to be closed momentarily when the rotor yoke is rocked or cocked away from it and afterwards quickly separated by the rebound impact of the yoke on its release from operating plunger

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Arrange that portion of the paragraph following the above insertion, beginning with "The", line 17, page 4, and ending with line 24, same page, as a separate paragraph.

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Remarks.

In view of the above amendment and the probable change in the Examiner's recommendations, as expressed at the said oral interview, Applicant is at this date asking for a rehearing of the petitions to the Commissioner under date of Oct. 4, 1915 and Sept. 1, 1915, respectively.

Since this amendment is believed to introduce no new matter not covered in scope by the amendment of Sept. 18, 1915 (Chicago), not entered, it is believed that the oath accompanying said amendment is applicable to the present amendment without revision, but a new oath will be furnished if thought desirable by the Office.

Respectfully submitted,

BROWN NISSEN & SPRINKLE,
Attorneys for Edmund J. Kane.

Washington, D. C.

Oct. 18, 1915.

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2-213

Forwarded from Div. 28 to
Examiner of Interferences.
Oct. 20, 1915.

Paper No. 21
[Interference.]

DEPARTMENT OF THE INTERIOR.

United States Patent Office,

Washington, D. C.

(Rubber Stamp) U. S. Patent Office, Interference Division
Oct 26 1915 Mailed
Brown, Nissen & Sprinkle,
312 So. Dearborn St., Chicago,

III.

Please find below a copy of a communication from the Examiner concerning the application of Edmund Joseph Kane, S. No. 2097, filed Jan. 14, 1915, Electric Igniters, Division of Application No. 541,428, filed Feb. 2, 1910.

Very respectfully,

THOMAS EWING
Commissioner of Patents.

Room No.

Address only

The Commissioner of Patents
Washington, D. C.

6-1636 39181

The case, above referred to, is adjudged to interfere with others, hereafter specified, and the question of priority will be determined in conformity with the Rules.

The statement demanded by Rule 110 must be sealed up and filed on or before Nov 29 1915, with the subject of the invention, and name of party filing it, indorsed on the envelope. The subject-matter involved in the interference is

Count 1. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, springs means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

Count 2. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, springs means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

Count 3. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

Count 4. The combination of an igniter having relatively

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(Kane, 2097).

fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

Count 5. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

Count 6. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

Count 7. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base, spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

Count 8. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

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(Kane, 2097).

Count 9. The combination of an igniter frame, comprising a body and laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted

in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

The interference involves your application above identified and

A Patent (Reissue No. 13,878, Reissued Feb. 9, 1915) for Current-Generator and Igniter for Internal-Combustion Engines, to Emil Podlesak, of Racine, Wis., whose attorney is Lynn A. Williams, Monadnock Block, Chicago, Ill.

The relation of the counts of the interference to the claims of the respective parties is as follows:

| Counts: | Kane: | Podlesak: |
|---------|-------|-----------|
| 1 | 7 | 13 |
| 2 | 8 | 14 |
| 3 | 9 | 15 |
| 4 | 10 | 19 |
| 5 | 11 | 20 |
| 5 | 12 | 21 |
| 7 | 13 | 22 |
| 8 | 14 | 23 |
| 9 | 15 | 24 |

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A R BENSON
Examiner.

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2-079

INTERFERENCE.

| | |
|--|----------------------|
| Interference No. 39181 | Paper No. 22 |
| Name, Edmund Joseph Kane | |
| Serial No. 2097 | |
| Title, Electric Igniters | |
| Filed, Jan. 14, 1915 | |
| Interference with Emil Podlesak (Reissued Patent No. 13,878) | |
| Decisions of | |
| Primary Examiner, | Dated, |
| Ex'r of Interferences, Favorable | Dated, March 24/16. |
| Board, Adverse | Dated, Jan. 15/17 |
| Commissioner, " | Dated, June 18, 1917 |

Remarks:

This should be placed in each application or patent involved in interference in addition to the interference letters by Primary Examiner.

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6-1970

977 (Rubber Stamps) Mail Room May 4 1916 U. S. Patent Office
Docket Clerk May 4 1916 U. S. Patent Office
2,097—23
Doc

UNITED STATES PATENT OFFICE

Applicant—Edmund Joseph Kane Case
Invention—Electric Igniters Div. 28
Serial No.—2,097 Filed January 14, 1915.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

I, Edmund Joseph Kane, of Chicago, in the County of Cook and State of Illinois, do hereby revoke all powers of attorney heretofore executed by me and do hereby appoint Lynn A. Williams and Clifford C. Bradbury, of the co-partnership of Williams & Bradbury (Reg. No. 10,473), of 720 Monadnock Block, Chicago, Illinois, my attorneys, with full power of revocation and substitution, to prosecute my application for United States Letters Patent Serial No. 2,097, filed January 14, 1915, for an improvement in Electric Igniters, to make alterations and amendments therein, to receive the patent and to transact all business in the Patent Office connected therewith.

Signed at Chicago, in the County of Cook and State of Illinois, this 20th day of April, A. D. 1916.

EDMUND JOSEPH KANE

(Documentary revenue 25-cent stamp.)

Accepted May 3 1916.

R F WHITEHEAD

Assistant Commissioner.

2097

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Serial No 2097 Paper No. 24
2-069

Address only
The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR.

United States Patent Office,

Washington, D. C.

May 5, 1916

You are hereby informed that Your Power of Attorney Has
*(Revoked)
Been Accepted in the matter of the application of Edmund J.
Kane for Letters Patent for an Improvement In Electric
Igniters No. 2097. Filed Jan. 14, 1915.

Very respectfully,

THOMAS EWING,
Commissioner.

Williams and Bradbury
720 Monadnock Block
Chicago, Ill.

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*Matter in italics in parentheses, stricken out in original transcript.

979 141

2—069

EEG

Address Only

The Commissioner of Patents,
Washington, D. C.

DEPARTMENT OF THE INTERIOR,

United States Patent Office,

Washington, D. C.

May 5, 1916

You are hereby informed that Your Power of Attorney Has
Revoked
Been **(Accepted)* in the matter of the application of Edmund
J. Kane for Letters Patent for an Improvement in Electric
Igniters No. 2097 Filed Jan. 14, 1915

Very respectfully,

THOMAS EWING,
Commissioner.

Brown, Nissen & Sprinkle
312 S. Dearborn St.
Chicago, Ill.

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*Matter in italics in parentheses, stricken out in original transcript.

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(Rubber stamps) Mail Room Jun 17 1918 U. S. Patent
Office U. S. Patent Office Jun 18 1916 Division XXVIII.

UNITED STATES PATENT OFFICE

Applicant—Edmund Joseph Kane

Case 2.

Invention—Electric Igniters

Serial No.—2097

Filed January 14, 1915.

1315 Monadnock Block,
Chicago, Ill., June 15, 1918.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

In the matter of the above entitled application please add
the following claims:

7. **(16.)* In an electrical ignition device for internal
combustion engines, the combination of a magneto gen-
erator comprising rotor and stator and generating wind-
ing, a pair of relatively movable make and break spark
electrodes adapted to be located within an engine cylin-
der, spring means tending normally to hold said rotor
in a certain position, mechanism whereby the movement
of the rotor effects the separation of said electrodes at a
predetermined point in the movement of the rotor, a rigid
unitary and integral support upon which all of the afore-
said parts are mounted, whereby all of said parts may
be removed from and returned to their position upon an
engine cylinder without disturbing their relations one to
another, conductors for carrying electric current from
said generating winding to said electrodes, and engine
driven means adapted to oscillate said rotor against the
action of said spring means and then to release it.

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981 8 **(17.)* In an electrical ignition device for internal
combustion engines, the combination of a magneto genera-
tor comprising rotor and stator and generating winding,
a pair of relatively movable make and break spark elec-
trodes adapted to be located within an engine cylinder,

**Matter in italics in parentheses, stricken out in original transcript.*

spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, a supporting member upon the several parts of which all of the aforesaid mechanism is mounted and having a single integral part adapted to be attached to the engine, whereby all of said mechanism may be removed from the engine by removing said single integral part and may be returned to its position upon the engine with unchanged relations between and all of the parts of all of said mechanism, thereby insuring the predetermined synchronism and interrelated adjustment of said mechanism when it is replaced upon the engine, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it.

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Remarks:

This application was the subject of an oral interview between the Principal Examiner and Mr. Walter Brown, Vice-President and General Manager of the Webster Electric Company, the assignee of record, and Lynn A. Williams, a member of the firm of attorneys of record, on June 6th and 7th.

This application has recently been involved in two interferences, No. 39,013, between Kane and Milton, and No. 39,181 between Kane and Podlesak. Testimony was taken in the interference between Kane and Milton as a result of which

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982 priority of invention was awarded to Kane as to all of the six counts involved in the interference.

In the interference between Kane and Podlesak, Podlesak's preliminary statement did not allege a date of invention as early as the filing date of Kane's original application, of which the present application is a division, and as a consequence the Examiner of Interferences gave notice of a judgment to be entered upon the record in favor of Kane unless Podlesak should show cause to the contrary.

Thereupon Podlesak's motion to dissolve the interference upon the ground that Kane's disclosure did not support the counts of the interference issue was referred to the Law Ex-

aminer and decided by him to the effect that Kane could and did have the right to make the claims.

Following this decision of the Law Examiner the Examiner of Interferences entered a pro forma judgment of priority in favor of Kane. Thereupon Podlesak took an appeal to the Board of Examiners in Chief. The decision of the Court of Appeals in Rowntree vs. Sloan was rendered just prior to the argument of this case to the Board and the Board awarded priority to Podlesak upon the ground that Kane was estopped under the doctrine of Rowntree vs. Sloan to make the claims of the issue.

Kane then took an appeal to the Commissioner of Patents who declined to follow the Board upon the matter of estoppel, but who decided, in accordance with the Principal Examiner's original views in this case, that Kane's disclosure did not support the interference issue. The Commission's award of priority having, therefore, been in favor of Podlesak Kane took an appeal to the Court of Appeals which recently rendered a decision, a copy of which we understand is in the

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Examiner's application file. The decision of the Court of Appeals awards priority of invention to Podlesak upon the ground that Kane is estopped to make the claims of the Podlesak patent, and the Court also expressed its agreement with the conclusion of the Commissioner that the claims of the interference issue are not readable upon Kane's disclosure. For convenience in reference we are sending herewith a copy of the printed record and briefs in the Court of Appeals. The printed record contains the briefs filed by Podlesak before the lower tribunals. These briefs will advise the Examiner as to the various features and elements of the several counts of the Kane-Podlesak interference which were contended by Podlesak and his attorneys not to be found in Kane's structure. These contentions were, mainly, that the claims copied from the Podlesak patent were limited to a structure having a certain specific arrangement of spring tensions and anvil adjustment such that the electrode points must be normally separated; that the generator must be removably mounted as a whole upon the shelf of the bracket member; that the bracket member must have a flat horizontal shelf or base which must lie underneath the generator and

from which the generator can be removed in toto, including its bearings; and that the Kane structure did not embody these details and refinements.

There is and has been no question of the fact that Kane's structure was invented, reduced to practice, and put into public use before Podlesak had any conception of the structure disclosed in his patent. The fact is that Podlesak went to work for the Webster Electric Company some years later than Kane and at a time when the Webster Electric Company had been manufacturing and selling the Kane structure, as a result of which the Kane structure became fully known to Podlesak before his original application filed and before he

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claims to have invented the subject matter of his patent. His contentions thruout the interference case have been to the effect that his invention was limited to details and refinements not found in the Kane structure which preceded his invention.

The two claims presented herewith are not limited to any of these refinements or details.

The decision of the Court of Appeals is, of course, binding upon the Primary Examiner to the effect that Kane is now estopped to make these specific and detailed claims of the Podlesak patent because of his delay in so doing.

Insofar as any prosecution of this application before the Primary Examiner is concerned we promptly concede that we are bound by the estoppel of res adjudicata and by the Court of Appeals. It is clear, however, that this estoppel does not and cannot run as against the claims now presented.

In the first place the estoppel invoked against Kane is based wholly upon the fact that Podlesak claimed and issued a patent claiming the invention involved in the interference long in advance of the date at which Kane first claimed this subject matter.

Secondly, when Kane first filed his present application he made six claims, some of which, as for example claim 5, are much broader than the Kane-Podlesak interference issue and which unquestionably read upon the Podlesak disclosure. This claim 5, and others, stand allowed in the Kane application and they have thus stood thruout the interference proceeding. These claims were the subject matter of the inter-

ference between Kane and Milton in which the award of priority was to Kane.

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There is and can be no estoppel against Kane as to these broad claims as originally filed by him prior even to the issue of the Podlesak patent.

These same broad claims were, in fact, made in Kane's original application long prior to the filing even of Podlesak's reissue application and were incorporated in Kane's present application only because of the Office requirement for division.

It is clear, therefore, that no estoppel can be asserted against Kane as to these broader claims which now stand allowed in the case and which have been in the application from the beginning.

If these certain broad claims readable upon the Podlesak structure are not subject to the estoppel there is no reason why an estoppel can be asserted against the claims which are presented by this amendment.

Furthermore, Podlesak has, in effect, contended thruout that he does not and never has claimed the broad subject matter of the claims now presented. Such being the case, there can be no more of an adverse interest upon which to base an estoppel than if Podlesak had never secured any patent whatsoever.

To put the matter briefly, if Kane were to cancel the claims involved in the interference with Podlesak, and if the patent should issue to Kane containing the six claims which have stood in the Kane application from the beginning and also the two claims now presented, Podlesak would have his patent containing the specific claims which alone cover what he claims to have been his invention and Kane would have a patent covering, not Kane's specific improvements, not Po-

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Podlesak's specific improvements, but the broad subject matter disclosed by both Kane and Podlesak but to which Podlesak makes no claim.

It seems clear that the adjudication in the interference can be no bar to the allowance of the claims now presented.

At the oral interview above referred to, we demonstrated to the Examiner the advantage of the Kane structure over that of the Weber patent No. 820,535 of the prior art, and we believe that the claims now presented distinguish clearly from the disclosure of the Weber patent and from all else in the prior art which has been cited or which has come to our attention. The claims now presented require that all of the mechanism comprising the combination of elements stated in the claims shall be mounted upon the supporting member whereby the relative adjustments and synchronism may be maintained or insured no matter how often the ignition mechanism may be removed from and replaced upon the engine with which it is associated. In the Weber device there are two supporting members adapted to be attached to different parts of the engine. Upon one of these members the electrodes are mounted. Upon the other member the spring mechanism and push rod engaging mechanism are mounted. Weber's generator is in turn mounted upon still a third part of the supporting arrangement and this separate generator supporting shelf is in turn clipped under two of the bolt heads which hold the flange of the igniter plug to the engine cylinder. In Weber, therefore, it is impossible to remove the entire ignition equipment as a unit or without disassembling it, and any slight failure to return all of the supporting parts

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to their identically same positions and same relative positions is bound to alter the interadjustment and relationships between the essential functional parts of the ignition equipment, with consequent liability to destroy the necessary synchronism, let alone the inconvenience and labor involved in attempting to remove and replace the ignition equipment.

The claims now presented are not descriptive of the Weber device. They do describe the features of Kane's structure wherein Kane's very important practical advantages over Weber inhere.

It is respectfully submitted that these claims are allowable, and while, of course, we anticipate the Examiner's formal rejection of claims 7 to 15, inclusive, which were involved in the interference with Podlesak, we shall be glad to have the Examiner indicate in his action the allowability of the claims

now presented in order that we may be in a position to conclude promptly the prosecution of the application.

Respectfully,

EDMUND JOSEPH KANE,

By WILLIAMS & BRADBURY,

Attorneys.

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Division 28 Room 225

Address only "The Commissioner of Patents, Washington, D. C.," and not any official by name.

Paper No. 26
All communications respecting this application should give the serial number, date of filing, title of invention, and name of the applicant.

DEPARTMENT OF THE INTERIOR

RYH

United States Patent Office

Washington

July 6, 1918.

Williams & Bradbury,
720 Monadnock Block,
Chicago, Ill.

(Rubber Stamp) U. S. Patent Office Jul 6 1918 Mailed.

Please find below a communication from the Examiner in charge of the application of Edmund Joseph Kane, S. No. 2097, filed Jan. 14, 1915, Electric Igniters.

JAMES T. NEWTON

Commissioner of Patents.

c6—2681

Case considered as amended June 17, 1918.

The recent interference in which this application was involved having terminated adversely to applicant, claims 7 to 15, corresponding to the issues of said interference, are finally rejected.

Claims 16 and 17 are allowed.

BENSON

Examiner.

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989 Enter * (*Not of record in Div. 14 Not in District No.*)

27D

(Rubber Stamps) Mail Room Aug 3 1918 U. S. Patent Office U. S. Patent Office Aug 6 1918 Division 14 U. S. Patent Office Paper No. Aug 7 1918 Division XXVIII.

UNITED STATES PATENT OFFICE.

Applicant—Edmund Joseph Kane

Case 2.

Invention—Electric Igniters

Serial No.—2097

Files January 14th, 1915.

T28

1315 Monadnock Block,
Chicago, Ill., July 30, 1918.

Hon. Commissioner of Patents,
Washington, D. C.

Sir:

In the matter of the above entitled application please amend as follows:

By cancelling claims 7 to 15, inclusive, and renumbering 16 and 17 as 7 and 8.

Remarks:

The claims rejected by office action of July 6th, 1918, having been cancelled by the above amendment, this application now appears to be in condition for allowance which is respectfully requested.

Attached hereto is a supplemental Oath relating to the claims filed by the amendment of June 17th, 1918.

Respectfully,

EDMUND JOSEPH KANE,
By WILLIAMS & BRADBURY,
Attorneys

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*Matter in italics in parentheses, stricken out in original transcript.

990 (Rubber stamps) (Illegible) Aug 6 1918 Division 14.
Mail Room Aug 3 1918 U. S. Patent Office U. S. Patent
Office Aug 7 1918 Division XXVIII.

Serial No.✓ Paper No.

SUPPLEMENTAL OATH.

State of Ill. }
County of Cook. } ss:

EDMUND JOSEPH KANE, whose application for letters patent for an improvement in Electric Igniters, serial No. 2097, was filed in the United States Patent Office on or about the 14th day of January, 1915, being duly sworn, deposes and says that he has read the amendment filed June 15th, 1918, in the above entitled application, and that the subject matter of said amendment was part of his invention, was invented before he filed his original application, above indetified, for such invention, was not known or used before his invention, was not patented or described in a printed publication in any country more than two years before his application, was not patented in a foreign country on an application filed by his legal representatives or assigns more than twelve months before his application, was not in public use or on sale in this country for more than two years before the date of his application, and has not been abandoned.

EDMUND JOSEPH KANE.

Sworn to and subscribed before me this 1st day of Aug 1918.

MARY A COOK
Notary Public

(Seal)
2097
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Address only
The Commissioner of Patents,
Washington, D. C.

Serial No. 2097.

WTP

DEPARTMENT OF THE INTERIOR

United States Patent Office

Washington

August 27, 1918.

Edmund Joseph Kane, Assor.

Sir: Your Application for a patent for an Improvement in Electric Igniter filed January 14, 1915, has been examined and Allowed.

The final fee, Twenty Dollars, must be paid not later than Six Months from the date of this present notice of allowance. If the final fee be not paid within that period, the patent on this application will be withheld, unless renewed with an additional fee of \$15, under the provisions of Section 4897, Revised Statutes.

The office delivers patents upon the day of their date, and on which their term begins to run. The printing, photolithographing, and engrossing of the several patent parts, preparatory to final signing and sealing, will require about four weeks, and such work will not be undertaken until after payment of the necessary fee.

When you send the final fee you will also send, Distinctly and Plainly Written, the name of the Inventor, Title of Invention, and Serial Number as Above Given, Date of Allowance (which is the date of this circular), Date of Filing, and, if assigned, the Names of the Assignees.

If you desire to have the patent issue to Assignees, an assignment containing a Request to that effect, together with the Fee for recording the same, must be filed in this office on or before the date of payment of final fee.

After issue of the patent uncertified copies of the drawings and specifications may be purchased at the price of Five Cents Each. The money should accompany the order. Postage stamps will not be received.

Final fees will Not be received from other than the appli-

cant, his assignee or attorney, or a party in interest as shown by the records of the Patent Office.

Respectfully,

JAMES T. NEWTON
Commissioner of Patents.

Williams & Bradbury,
720 Monadnock Block,
Chicago, Ill.

(In left-hand margin) ~~23~~ In Remitting the Final Fee Give the Serial Number at the Head of this Notice.

(In right-hand margin) ~~23~~ Uncertified Checks Will Not be Accepted.

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MEMORANDUM

of

Fee Paid at United States Patent Office.

(Rubber stamp) [✓] \$20 Rec't Aug 29 1918 C. S. U. S. Pat.
Office

(Be careful to give correct Serial No.)

Serial No. 2,097

, 191

Inventor: Edmond Joseph Kane

Patent to be Issued to Inventor

Name of Invention, as Allowed: Electric Igniters

Date of Payment: Aug. 29, 1918

Fee: \$20.00

Date of Filing: January 14, 1915

Date of Circular of Allowance: August 27, 1918

The Commissioner of Patents will please apply the accompanying fee as indicated above.

WILLIAMS & BRADBURY
Attorneys.

Send Patent to

Williams & Bradbury,
1315 Monadnock Block,
Chicago, Ill.

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84

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CONTENTS:

Print—Aug. 14/15

1. Application O K papers.
2. Rej.—May 24 1915
3. Amdt. A Apr. 17, 1915
4. Sup. Oath May 10, 1915
5. Rej. Aug 6, 1915
6. Interference Aug. 24, 1915
7. Interference Card
8. Amdt. Aug 26/15 Not Entered
9. Petition Sept. 3, 1915
10. Affidavit Sept. 7, 1915
11. Exrs. statement Sept. 8 1915
12. Comr's decision paper #9 Sept. 15, 1915
13. Notice of Decision, Sept. 16, 1915
not entered
14. Amendt. A & Supplemental Oath, Sept 20 1915
15. Petition Oct. 6, 1915
16. Exrs. Statement Oct. 9, 1915
17. Commiss'rs decision (paper #15) Oct 9, 1915
18. Notice of decision Oct 11, 1915
19. Restoration of Jurisdiction Oct 18/15
20. Amdt B Oct 18/15
21. Interference Oct 26 1915
22. Interference Card
23. Revocation and Power of Attorney May 4/16
24. Notices of Revocation and Acceptance May 5/16
25. Amd't C June 17, 1918
26. Rej. July 6, 1918
Sup. Oath
27. Amdt D and Aug. 3/18
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IN THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA,

| | | |
|--------------------|---|-----------------------------------|
| Edmund J. Kane, | } | Patent Appeal Docket No. 1147. |
| <i>Appellant</i> , | | |
| <i>v.</i> | | |
| Emil Podlesak. | | |

This is an appeal from a decision of the Commissioner of Patents awarding priority of invention to Podlesak.

A motion to dissolve the interference, filed by Podlesak, was made on the ground that Kane had no right to make the claims of the issue; first, because of laches and estoppel; second, because the claims, all of which were taken from a re-issued patent of Podlesak, when properly construed would not read on Kane's structure; and, third, because the terms of the claims if expanded in meaning in an attempt to read them on the Kane structure, would also read upon devices of the prior art. The Commissioner of Patents set this motion for hearing as the second ground, but not as to the first and third, saying that the alleged delay in the presentation of the claims by Kane would not constitute ground for dissolving the interference, and that Podlesak, being a patentee, could not allege that the claims of the issue should be more narrowly construed than the plain terms would warrant.

The law examiner held that Kane had the right to make the claims and denied the motion for a dissolution. The Board of Examiners in Chief held on the authority of *Rountree v. Sloan*, 45 App. D. C. 207, that Kane was estopped from making the claims because of laches, stating that it was not necessary to pass upon the question of Kane's right to make the claims of the interference.

The Commissioner sustained the decision of the Examiners in Chief but on the ground that Kane was not entitled to make the claims. He called attention to the fact that the claims first appeared in the Podlesak reissue patent and that Kane filed his amendment including those claims within a month after the granting of the reissue patent; but he added that he was not disposed in the absence of experience with the rule laid down in *Rountree v. Sloan*, *supra*, to acquiesce in the extension of it made by the Examiners in Chief by applying it to the present case.

Kane's original application was filed on February 2, 1910. His present application here in question and claimed to be a division thereof, was filed January 14, 1915. The application for Podlesak's original patent was filed April 15, 1912, and he obtained his patent March 4, 1913. On December 23, 1914, Podlesak applied for a reissue. A reissue patent was granted February 9, 1915. On April 19, 1915, Kane amended his alleged divisional application so as to make the claims of the present issue.

In *Rountree v. Sloan*, supra, this court held that failure to make the claims of the issue on the part of one of the parties to an interference for three years after the grant of a patent to his adversary estopped him from making the claims, because the life of the patent monopoly would be extended if the party seeking to make the claims should be finally successful, citing *Re Fritz*, 45 App. D. C. 211. Mr. Justice Robb for the court said that the claims should have been made promptly and at least within the time allowed for amendment after office action.

We are of the opinion that the Examiners in Chief were right in holding that the present application comes within the rule of the *Rountree* case. A reissue patent must be for the same invention as the original patent but the patentee may redescribe his invention, including however in the description and claims of the specifications only what was well described before or what was suggested or substantially 1001 indicated in his old specification or drawings as properly belonged to the invention as actually made and perfected. *Marsh v. Seymour*, 97 U. S. 348-356. The basis for the claims of the issue in this matter is therefore to be found in Podlesak's original patent of which Kane had notice from the date of its issue. Kane should therefore have moved promptly and not having done so is estopped to make the claims.

Were the case otherwise as to laches we should be inclined to affirm the decision of the Commissioner upon the grounds upon which he placed it; that is to say, because Kane has no right to make the claims. The Commissioner points out that both parties were claiming for improvements over the prior art and in slight particulars only but that Kane nowhere disclosed in his original or divisional application, until he came to make the claims of the Podlesak patent, that he was concerned with keeping the electrodes of the igniter normally

separated or that he had invented what can be reasonably called an integral bracket.

The decision of the Commissioner is affirmed.

By the Court:

WALTER I. McCoy,
Justice.

(Endorsed:) No. 1147, Patent Appeal Docket. Edmund J. Kane, Appellant, vs. Emil Podlesak. Opinion of the Court per Mr. Justice McCoy. Court of Appeals, District of Columbia, Filed May 6, 1918. Henry W. Hodges, Clerk. 1048 X 105—92

DEFENDANT'S EXHIBIT 66.

ASSIGNMENT

For and in Consideration of the sum of One Dollar (\$1.00) to me in hand paid, and other good and valuable consideration, the receipt of which is hereby acknowledged, John L. Milton, of Louisville, in the County of Jefferson, and State of Kentucky, to hereby sell, assign and transfer unto Lynn A. Williams, Trustee of Chicago, Illinois, the whole right, title and interest in and to my inventions and improvements disclosed in the following named United States Letters Patent and applications for patent and in and to the following United States Letters Patent and applications for patent:

| Case | Serial No. | Filed | Allowed | Issued | Improvement |
|------|------------|----------|----------|---------------------|--|
| 1 | 307,391 | 3/22/06 | 11/ 5/09 | 5/31/10 #959,954 | Electric Generators. |
| 2 | 357,041 | 2/12/07 | | | Inductor Generators. |
| 3 | 379,485 | 6/17/07 | | | Inductor Generators. for Ignition Purposes. |
| 5 | 443,608 | 7/15/08 | | | Magneto Ignition Apparatus. |
| 9 | 475,171 | 1/30/09 | | | Apparatus and Method for Generating Alternating Currents. |
| 10 | 589,654 | 10/28/10 | | | Magneto Generators. |

the said right, title and interest to be held and enjoyed by the said Lynn A. Williams, Trustee, for its own use and behoof and for the use and behoof of its successors and assigns 1041 to the full and of the term for which said Letters Patent and may be granted, as fully and entirely as the

—1—

same would have been held and enjoyed by me had this assignment and sale not been made, and I hereby sell, assign

and transfer to Lynn A. Williams, Trustee, all rights and causes of action and suit resulting from infringements of said patents which may have occurred at any time during the life of said patent and prior to the date hereof, and I further hereby sell, assign and transfer unto said Lynn A. Williams, Trustee, the whole right, title and interest in and to any inventions and improvements relating to Low Tension Ignition Apparatus and Systems which I have made, and I agree to execute all papers, including formal assignments, which may be necessary or expedient to enable said Lynn A. Williams, Trustee to obtain and acquire patents thereon and legal title thereto.

I Authorize and Request the Commissioner of Patents to issue the patents which may be granted on said applications to said assigns for the sole use and behoof of said assignee, its successors and assigns.

In Testimony Whereof, I have signed my name and affixed my seal, at Chicago, Illinois, as of the 10th day of April, A. D. 1912.

JOHN L. MILTON (Seal)

State of Illinois }
County of Cook } ss:

Be it remembered that on this 10th day of April, 1912, before me, Leonard W. Novander, a Notary Public, duly commissioned, qualified and acting in and for the County and State aforesaid, come John L. Milton, personally known to me to be the identical person whose name is subscribed to the foregoing instrument of writing and acknowledged that he executed and signed the same as his free act and deed for the purposes and consideration therein expressed.

In Witness Whereof I have hereunto set my hand and affixed my official seal the day and year last above written.

LEONARD W. NOVANDER

Notary Public.

Leonard W. Novander

Notary Public

Cook Co. Ill.

Recorded December 13, 1915.—2—#598

E H G

G R M

E C M

(Endorsed) Feb 1-1919

DEFENDANT'S EXHIBIT 67.

1043 E H G
 M E W
 L L W
 D105—69

ASSIGNMENT

For and in Consideration of the sum of One Dollar (\$1.00) to me in hand paid, and for other good and valuable considerations, receipt of which is hereby acknowledged, I, Lynn A. Williams, Trustee, of the City of Chicago, in the County of Cook, and State of Illinois, do hereby sell, assign, and transfer unto the Webster Electric Company, a corporation organized and existing under the laws of the State of Wisconsin, and having its principal place of business at Racine, Wisconsin, the whole right, title, and interest in, to, and under the following United States Patents issued to John L. Milton:

| Patent No. | Issued | Improvement in |
|----------------|-------------------|--|
| 959,954 | May 31, 1910 | Electric Generator |
| 1044 1,051,373 | January 21, 1913 | Inductor Generator for Ignition Purposes |
| 1,053,107 | February 11, 1913 | Apparatus for Generating Ignition Purposes |
| 1,096,853 | May 19, 1914 | Magneto Generator |
| 1,096,048 | May 12, 1914 | Magneto Generator |
| 1,142,047 | June 8, 1915 | Inductor Generator |

together with all rights of action for past infringement thereof.

Signed, Sealed, and Delivered this 28th day of June 1918.
 LYNN A. WILLIAMS

In Presence of:

MARY A. COOK
 ANDREW WINTERCORN

Trustee.

State of Illinois }
 County of Cook } ss:

Be it Remembered that on this 28th day of June 1918, before me, Mary A. Cook, a Notary Public, duly commissioned, qualified, and acting in and for the County and State aforesaid, came Lynn A. Williams, who is personally known to me to be the identical person described in and who executed and signed the foregoing instrument of writing, and duly acknowl-

edged that he executed the same as his free act and deed for the purposes and considerations therein expressed.

In Witness Whereof, I hereunto set my hand and affix my official seal the day and year last above written.

MARY A. COOK

Notary Public.

Recorded July 1 1918.

371

MARY A. COOK

Notary Public

Cook County

Illinois.

(Endorsed) Feb. 1 1919

DEFENDANT'S EXHIBIT 68.

Know All Men By These Presents, that Webster Electric Company, a corporation of West Virginia, having its principal place of business in the City of Racine, (Endorsed) Feb 1-1919

1048 County of Racine and State of Wisconsin, party of the first part, for and in consideration of the sum of One Dollar (\$1) lawful money of the United States of America, to it in hand paid at and before the ensembling and delivery of these presents by the Webster Electric Company, a corporation of Wisconsin, having its principal place of business in the City of Racine, County of Racine and State of Wisconsin, party of the second part, and other good and valuable consideration, the receipt whereof are hereby acknowledged, has bargained, sold, granted, transferred, assigned, and conveyed, and by these presents does bargain, sell, grant, transfer, assign and convey unto the said party of the second part, all of the following goods and chattels and property, to wit:

All the property, property rights, business and assets belonging to said first party or in which it is interested, including all its copyrights, trade-rights, trade-names, patents, patent rights, devices and inventions of every kind and character, owned by, or in which said first party has any interest whatsoever; including any and all interest in or to and any or all benefits and any and all claims and rights of action past or future arising out of any and all of the following contracts, to wit:

A "License Agreement" between Webster Electric Com-

pany of West Virginia and Emil Podlesak and Henry Joseph

—1—

Podlesak, dated February 5, 1914, relating to United States Letters Patent numbered 947,647, 948,483, 1,003,649;

A "License Agreement (shopright)" between Webster Electric Company of West Virginia and Emil Podlesak and Henry Joseph Podlesak, dated February 5, 1914, relating to United States Letters Patent numbered 1,022,642, 1,055,076 (Reissue No. 13,878), 1,056,360, and pending applications for United States Letters Patent serial No. 734,153 (since issued as patent No. 1,101,956), serial No. 668,153 (since issued as patent No. 1,098,754) and serial No. 639,738 (since issued as patent No. 1,098,052);

A "Supplemental Agreement" between Webster Electric Company of West Virginia and Emil Podlesak and Henry Joseph Podlesak, dated January 20, 1915, relating to United States Letters Patent numbered 948,647, 948,483, (1,003,649, 1,022,642, 1,055,076, (Reissue No. 13,878), 1,056,360, 1,101,956, 1,098,052 and 1,098,754;

(Endorsed) Feb 1-1919

1049 An "Assignment and Agreement" by and between Emil Podlesak and the Webster Electric Company of West Virginia, dated February 5, 1914, and relating to Letters Patent of countries other than the United States of America, as follows:

German application No. 28,522;

German application No. 28,756 (since issued as German patent 260,204);

German application No. 29,217;

German application No. 29,218;

British application No. 8,988 of 1912 (since issued as a patent—same number);

British application No. 10,209 of 1912 (since issued as a patent—same number);

British application No. 25,646 of 1912 (since issued as a patent of the same number);

—2—

An "Agreement" between John L. Milton, the Webster Mfg. Company of Ohio, Webster Electric Company of West Virginia, and Towner K. Webster, dated April 10, 1912, and relating to certain applications of said Milton for United States Letters Patent and the patents issued or to be issued as a result thereof, and the escrow provided for, in which said escrow agreement was accepted by Lynn A. Williams

under date of April 10, 1912;

A "Trust Agreement" made and entered into between John L. Milton and Webster Electric Company of West Virginia, dated December 11, 1915, and relating to United States Letters Patent numbered 959,954, 1,051,373, 1,053,107, 1,096,048, 1,096,853 and 1,142,047, or the then pending applications therefor;

And in and to any other license or agreement or contract relating to any of the above or to any other patents or application for patents owned by said first party or in which it is interested;

Also all iron, steel, copper, magnetos, goods, wares, merchandise, fixtures, machinery, raw materials of all kinds, materials and goods in process of manufacture, patterns, tools and equipment; also all causes of action, claims, rights and demands, either in law or in equity; also all orders on hand and all contracts entered into by said first party, and relating to the business heretofore carried on by said first party; and also all real estate and buildings owned by said first party and located in the City of Racine, State of Wisconsin, or elsewhere; together with all other property, property

—3—

rights, and assets, tangible or intangible, of every kind, nature and description, whatsoever and wherever located; including the good will of the business heretofore carried on by said first party, intending hereby to transfer to
(Endorsed) Feb 1-1919

1050 said second party and vest in it the legal ownership of the entire assets of said first party.

Subject to any and all obligations arising from any contracts hereinabove mentioned, all of which said contracts said second party shall and hereby does assume and agree to perform. Also subject to all liens, encumbrances, debts and liabilities direct, contingent, and otherwise against said first party, now in existence or which may at any time hereafter be asserted against said first party; all of which said liens, encumbrances, debts and liabilities said second party assumes and hereby agrees to pay and discharge.

Said first party hereby agrees to execute any and all additional deeds and instruments which may be necessary to convey to said first party any and all of the property and property rights hereinabove mentioned.

To Have and to Hold said goods, chattels, assets, and

property unto the said party of the second part, its successors and assigns forever.

And the said party of the first part, for itself and its successors, does hereby covenant and agree to and with the said party of the second part, its successors and assigns, that it is the lawful owner of the property above described, that it has good right to sell, convey and transfer the same as aforesaid, and that it will warrant and defend the said property

—4—

hereby sold, unto the said party of the second part, its successors and assigns, against all lawful claims and demands of all persons.

In Witness Whereof, the said first party has caused this instrument to be executed by its duly authorized officers and its corporate seal to be hereunto affixed, at Chicago, Illinois, this 12th day of March, 1918.

WEBSTER ELECTRIC COMPANY OF WEST VIRGINIA

By T. K. WEBSTER
President.

The
Webster Electric
Company
Corporate
Seal

West Virginia.

Attest:

F. A. FISCHEL

Assistant Secretary.

Sealed and delivered in
the presence of:

HAROLD B. SMITH

JEANE N. FRANK

State of Illinois }
County of Cook } ss:

On this 12th day of March, 1918, before me, a Notary Public in and for Cook County, State of Illinois, personally appeared T. K. Webster and Frederic A. Fischel, to me personally known to be the President and Assistant Secretary, respectively,

(Endorsed) Feb 1-1919

1051 of the Webster Electric Company, a corporation of West Virginia, and severally acknowl-

edged that they executed the foregoing instrument as such President and Assistant Secretary, respectively, of said Webster Electric Company, a corporation of West Virginia, and affixed the corporate seal thereto as their free and voluntary act and as the free and voluntary act and deed of said Webster Electric Company, a corporation of West Virginia, for the uses and purposes therein set forth.

In Witness Whereof, I have hereunto set my hand and Notarial Seal, this 12th day of March, 1918.

A. KATE DEMPSEY
Notary Public.

A. Kate
Dempsey
Notary Public
Cook County,
Ill.

Recorded July 1, 1918. 1489

(Endorsed) Feb 1 1919

1040 D 99—86

1056 DEFENDANT'S EXHIBIT 73—E. O. E.

32313

To

The United States District Court.

From

The Municipal Court
of Chicago.

Gen. No. 209569.

Webster Electric Company, a corporation
under the laws of West Virginia.

vs

Tesla Emil Podlesak.

Transcript of Proceedings.

FRANK P. DANISCH.

Clerk.

(Endorsed) Filed Dec. 22, 1915, T. C. MacMillan, Clerk.

1057 The Municipal Court of Chicago.

Transcript of Proceedings.

United States of America

State of Illinois, }
County of Cook } ss:
City of Chicago, }

In the Municipal Court of Chicago

Pleas, Proceedings and Judgments, before The Municipal Court of Chicago, held in the City of Chicago, in the County of Cook and State of Illinois, at the places in the First District in said city provided by the corporate authorities of said city for the holding of said Court, in the year of our Lord, one thousand nine hundred and fifteen and the Independence of the United States, the one hundred and Fortieth.

Present:

Honorable James C. Martin, One of the Judges of the
Municipal Court of Chicago.

Maclay Hoyne, State's Attorney.

Anton J. Cermak, Bailiff.

Attest:

FRANK P. DANISCH,
Clerk.

1058 Be it Remembered, towit: that on the twenty-seventh day of November, A. D. 1915, the following among other proceedings were had in said Court and entered of record therein, to-wit:

Webster Electric Company, a corporation }
under the laws of West Virginia, } No. 209569
vs } First-class.
Tesla Emil Podlesak, }

1059 Be it Remembered, that to-wit: on the ninth day of November, A. D. 1915, a certain Praeceptum was filed in the office of the Clerk of the Municipal Court, in words and figures following to-wit:

1060 The Municipal Court

Praeipce—First Class.

State of Illinois,
County of Cook,
City of Chicago,
First District, } ss

The Municipal Court of Chicago

Webster Electric Company, a corporation under the laws of West Virginia,

Plaintiff,

vs

Tesla Emil Podlesak,

Defendant,

First Class No. 20956
Claim for \$70,000.00.

The Clerk of said Court will issue a summons in the above entitled cause to said defendant in a suit of trespass on the case on promises to the damage of said plaintiff in the sum of Seventy Thousand Dollars, directed to the bailiff of said court to execute and make it returnable on Monday the 22nd day of November, A. D. 1915.

LYNN A. WILLIAMS and

LEVINSON, BECKER, CLEVELAND & SCHWARTZ,

Plaintiff's Attorney.

Chicago, November 9th, 1915.

1061 Be It Remembered, that afterwards on the same day, to wit: the ninth day of November, A. D. 1915, a certain writ of summons was issued out of the office of the Clerk of said Municipal Court, under the seal thereof, directed to the Bailiff of said Court to execute, which writ, together with the return of the Bailiff thereon endorsed, were and are in words and figures following, to-wit:

1062 The Municipal Court of Chicago Summons—First Class.

State of Illinois, }
City of Chicago, } ss
First District, }

The People of the State of Illinois, to the Bailiff of the Municipal Court of Chicago—Greeting:

We Command You, to summon Tesla Emil Podlesak if he shall be found in your City personally to be and appear before The Municipal Court of Chicago, at the City Hall, in said City of Chicago, on Monday, the 22d day of November, A. D. 1915. to answer unto Webster Electric Company, a corporation under the laws of West Virginia in a plea of trespass on the case on promises to the damage of said plaintiff, as he say in the sum of Seventy Thousand (\$70,000.00) Dollars. And have you then and there this Writ with an endorsement thereon in what manner you shall have executed the same.

Witness, Frank P. Danisch, Clerk of our said court and the seal thereof, at Chicago, aforesaid, this 9th day of November, A. D. 1915.

FRANK P. DANISCH,
Clerk.

(Seal)

1063

RETURN.

Served this writ on the within named defendant Tesla Emil Podlesak by delivering a copy thereof to him and at the same time informing him of the contents thereof in the City of Chicago, this 9th day of November, 1915.

ANTON J. CERMAK,
By EDWARD FLANIGAN, Deputy.

1064 Be It Remembered, that to-wit: on the 12th day of November, A. D. 1915, a certain Special Appearance was filed in the office of the Clerk of the Municipal Court, in words and figures following, to wit:

1065

First Class No. 209,569.

State of Illinois }
City of Chicago }

In the Municipal Court

First District.

Webster Electric Company, a corporation under the laws of West Virginia, }
Plaintiff,
versus
Tesla Emil Podlesak, }
Defendant,

To the Clerk of said Court:—

Please enter my appearance in the above entitled action specially and for the sole purpose of contesting the jurisdiction of the court over my person and over the subject matter of the above entitled action.

Dated November 12th, A. D. 1915.

Yours, etc.,

TESLA EMIL PODLESAK,

In his own proper person

Post Office Address: 1322 Thurston Avenue, Racine, Racine County, Wisconsin.

1066 Be It Remembered, that afterwards, to wit: on the 12th day of November, A. D. 1915, the following among other proceedings were had and entered of record in said Municipal Court, which proceedings were and are in words and figures following, to-wit:

Present:

Honorable James C. Martin—One of the Judges of
The Municipal Court of Chicago.

Maclay Hoyne, State's Attorney.

Anton J. Cermak, Bailiff.

Frank P. Danisch, Clerk.

| | | |
|---|---|------------------|
| Webster Electric Company a corporation under the laws of West Virginia. | } | Case No. 209569— |
| <i>versus</i> | | |
| Tesla Emil Podlesak— | | |

On motion of the plaintiff herein, it is ordered that the time for filing Statement of Claim be and it is hereby extended twenty (20) days.

1067 Be It Remembered, that to-wit: on the 27th day of November, A. D. 1915, a certain Notice, Petition and Bond for Removal to United States District Court was filed in the office of the Clerk of the Municipal Court, in words and figures following, to-wit:

| | | |
|---|---|----|
| 1068 State of Illinois County of Cook City of Chicago, First District, | } | ss |
| | | |

In the Municipal Court of Chicago.

| | | |
|---|---|-----------------------------|
| Webster Electric Company, a corporation, under the Laws of West Virginia, | } | First Class No. 209,569. |
| <i>Plaintiff,</i> | | |
| <i>vs</i> Tesla Emil Podlesak, <i>Defendant,</i> | | |

NOTICE.

To Messrs. L. A. Williams, Esq., and Levinson, Becker, Cleveland & Schwartz, Esqs., Attorneys for Plaintiff:

Please Take Notice that On Saturday, November 27, 1915, at the opening of court, in the forenoon, or as soon thereafter as counsel can be heard, we shall present to His Honor Judge Martin, one of the judges of the Municipal Court, the petition of the above named defendant for the removal of the above entitled cause to the District Court of the United States for the Northern District of Illinois, Eastern Division; and

shall at the same time present for approval a removal bond in the same matter; and shall ask for an order for the removal of said cause, in accordance with the prayer of said petition, copies of said petition and bond being hereto attached.

PARKER & KING,

Attorneys for Tesla Emil Podlesak, Defendant.

Received a copy of the above notice and copies of the petition and bond therein mentioned this 26th day of November, A. D. 1915.

LYNN A. WILLIAMS.

1069 State of Illinois }
County of Cook } ss

Edward Voelcker, being first duly sworn on oath deposes and says that he is a clerk in the office of Parker & King, and that he served the within notice upon Levinson, Becker, Cleveland & Schwartz by leaving a true and perfect copy thereof, with copies of petition and bond thereto attached, with one Margaret Anglum, a person in charge of the office of said Levinson, Becker, Cleveland & Schwartz before the hour of four o'clock P. M. on Friday, November 26, A. D. 1915.

EDWARD VOELCKER

Subscribed and sworn to before me this 26th day of November, A. D. 1915.

(Seal)

ORPHA A. RANKIN,
Notary Public.

1070 State of Illinois, }
 County of Cook, } ss
 City of Chicago, }
 First District, }

In the Municipal Court of Chicago.

| | | |
|--|--------------|-----------------------------|
| Webster Electric Company, a corporation under the laws of West Virginia, | } Plaintiff, | First Class No. 209,569. |
| <i>vs</i> | | |
| Tesla Emil Podlesak, Defendant, | | |

PETITION FOR REMOVAL.

To the Honorable Judges of the Municipal Court of Chicago:

Your Petitioner, Tesla Emil Podlesak, Respectfully shows that he is the defendant in the above entitled cause, and that the matter and amount in controversy in the said cause exceeds, exclusive of interest and costs, the sum of Three Thousand Dollars (\$3000.00).

Your petitioner further shows that said suit is of a civil nature, being at common law for the recovery of money in the nature of an action of trespass on the case on promises.

Your petitioner further shows that in said suit there is a controversy which is wholly between citizens of different states which can be fully determined as between them, to-wit, a controversy between your said petitioner and the said plaintiff, Webster Electric Company; that the said Webster Electric Company and your Petitioner are actually interested in said controversy; that your Petitioner, who is the defendant

1071 in said cause, was at the time of the commencement of this suit, and still is, an inhabitant, resident and citizen of the State of Wisconsin, a resident of the County of Racine in said State of Wisconsin, and a non-resident of the State of Illinois; and that the said plaintiff, Webster Electric Company, was at the time of the commencement of said cause, and still is, a corporation organized and existing under and by virtue of the laws of the State of West Virginia, and a citizen and resident of said State of West Virginia, and a non-resident of said State of Wisconsin.

And your Petitioner herewith offers a bond with good and

sufficient surety in the penal sum of Five Hundred Dollars (\$500.00), conditioned for its entering in the District Court of the United States for the Northern District of Illinois, Eastern Division, within thirty days from the 27th day of November, A. D. 1915, a certified copy of the record in the above entitled cause, and for paying all costs that may be awarded by said District Court of the United States if said District Court shall hold that this suit was wrongfully or improperly removed thereto.

Your Petitioner further prays this Honorable Court to proceed no further herein, except to make an order of removal as required by law, and to accept the said surety and bond, and to cause the record herein to be removed to the said District Court of the United States for the Northern District of Illinois, Eastern Division, according to the statute in such cases made and provided. And so your petitioner will ever pray, etc.

TESLA EMIL PODLESAK,
Petitioner.

1072 State of Illinois }
County of Cook, } ss

Tesla Emil Podlesak, of lawful age, being first duly sworn, on oath deposes and says that he is the defendant in the above entitled cause; that he has read the foregoing Petition by him subscribed, and knows the contents thereof; and that the matters and things therein stated are true.

TESLA EMIL PODLESAK.

Subscribed and sworn to before me this 26th day of November, A. D. 1915.

(Seal)

OTIS H. WALDO, JR.,
Notary Public.

1073 State of Illinois
County of Cook,
City of Chicago,
First District, } ss

In the Municipal Court of Chicago.

| | | |
|--|--------------|-----------------------------|
| Webster Electric Company, A corporation under the Laws of West Virginia, | } Plaintiff, | First Class No. 209,569. |
| <i>vs</i> Tesla Emil Podlesak, | | |
| | Defendant, | |

BOND FOR REMOVAL.

Know All Men by These Presents, that we Tesla Emil Podlesak, as Principal, and the Illinois Surety Company, (a corporation organized and existing under the laws of the State of Illinois), as surety, are held and firmly bound unto Webster Electric Company, a corporation organized and existing under the laws of the State of West Virginia, in the penal sum of Five Hundred Dollars (\$500.00), lawful money of the United States, for the payment of which sum well and truly to be made we bind ourselves, our successors and assigns, jointly and severally and firmly by these presents.

Witness, our hands and seals this 27th day of November, A. D. 1915.

The condition of the above bond is such that whereas Tesla Emil Podlesak, the principal above named, has petitioned the

Municipal Court of Chicago, in the County of Cook, in
1074 the State of Illinois, for the removal of a certain suit
at law therein pending, wherein the said Webster Electric Company is party plaintiff, and the said Tesla Emil Podlesak is party defendant, into the District Court of the United States for the Northern District of Illinois, Eastern Division.

Now, therefore, if said bounden Tesla Emil Podlesak shall enter, or cause to be entered, in said District Court of the United States for the Northern District of Illinois, Eastern Division, on or before the 27th day of December, A. D. 1915, a certified copy of the record in said suit, and shall pay all costs that may be awarded by said District Court of the

United States, if said Court shall hold that said suit was wrongfully or improperly removed thereto, and shall do such other proper acts as by the Act of Congress in that behalf are required to be done upon removal of said suit from said Municipal Court of Chicago in said County of Cook, in the State of Illinois, to said District Court of the United States, then this obligation to be void, otherwise of full force and effect.

TESLA EMIL PODLESAK (seal)
ILLINOIS SURETY COMPANY,

By CHAS. E. BROWN,

(seal)

Attorney in fact.

1075 Be It Remembered, that afterwards, to-wit: on the 27th day of November, A. D. 1915, the following among other proceedings were had and entered of record in said Municipal Court, which proceedings were and are in words and figures following, to-wit:

Present:

Honorable James C. Martin—One of the Judges of The Municipal Court of Chicago.

Maclay Hoyne, State's Attorney.

Anton J. Cermak, Bailiff.

Frank P. Danisch, Clerk.

Webster Electric Company, a corporation under the laws of West Virginia,

versus

Tesla Emil Podlesak,

} Case No. 209569—

On motion of the plaintiff herein, it is ordered that the time for filing Statement of Claim be and it is hereby extended ten (10) days.

The defendant herein having filed his petition herein praying that this cause be transferred to the District Court of the United States, and having filed bond herein as provided by law, and it appearing that said petition and bond are in conformity with law, it is ordered that said bond be approved and that this cause be and the same is hereby transferred to the District Court of the United States for the Eastern Divi-

sion of the Northern District of Illinois, and that the Clerk of this Court do forthwith transfer to said District Court a full and complete transcript of all papers and proceedings in this cause.

1076 CERTIFIED TRANSCRIPT OF RECORD.

State of Illinois, }
County of Cook, } ss

I, Frank P. Danisch, Clerk of The Municipal Court of Chicago, in said County and State, and the keeper of the records and files thereof, in the City, County and State aforesaid, do hereby certify the above and foregoing to be a true, perfect and complete transcript of the record in a certain cause lately pending in said court wherein Webster Electric Company, a corporation under the laws of West Virginia, is plaintiff and Tesla Emil Podlesak, is defendant.

In Witness Whereof, I have hereunto set my hand and affixed the seal of said court at Chicago, aforesaid, this Sixteenth day of December, 1915.

FRANK P. DANISCH,

(seal)

Clerk.

1078

DEFTS. EX. 74 E. O. E.

State of Illinois }
County of Cook } ss
City of Chicago }
First District }

IN THE MUNICIPAL COURT OF CHICAGO.

| | | |
|--|--------------|--------------|
| Webster Electric Company, a corporation under the laws of West Virginia, | } Plaintiff, | No. 32313. |
| vs | | First Class. |
| Tesla Emil Podlesak, | | No. 209,569. |
| | } Defendant, | |

STATEMENT OF CLAIM.

Plaintiff alleges that for several years next prior to February 5th, 1914, the defendant was employed by the plaintiff in its manufacturing establishment in a confidential capacity, and for a large part of that time had had practical charge of the manufacturing part of the plaintiff's business; that the defendant alone and jointly with his brother, Henry Joseph Podlesak, was the patentee of certain inventions, and that he and his brother also developed and improved certain other inventions while he was so employed by the plaintiff, and he and his brother, individually and jointly, procured patents covering such inventions; that the inventions referred to pertained to the product manufactured by the plaintiff, and through the procurement of the defendant while he was so employed by the plaintiff, these inventions were embodied into the product so manufactured by the plaintiff and the plaintiff's business was to a large extent built up and based upon such inventions; and that the plaintiff expended a vast amount of time and several hundred thousands of dollars in developing said inventions and its said business.

That on February 5, 1914, the defendant and his said brother made and entered into two agreements in writing with the plaintiff, one for convenience designated herein as "License Agreement," and the other for convenience designated

nated as "License Agreement (Shop Right)," which said agreements were respectively as follows:

1080

LICENSE AGREEMENT.

This Agreement made and entered into this 5th day of February, 1914, by and between Emil Podlesak of Racine, Wisconsin, and Henry Joseph Podlesak of Chicago, Illinois, hereinafter called the parties of the first part, and The Webster Electric Company, a corporation of the State of West Virginia, whose principal office is in the City of Chicago, County of Cook and State of Illinois, hereinafter called the party of the second part, Witnesseth:

That Whereas the parties of the first part, having invented certain new and useful improvements in Inductor Electric Generators for Internal Combustion Motor Ignition, for which certain Letters-Patent of the United States of America have been granted, which all they jointly own, to-wit:—

Number 947,647, issued January 25th, 1910, Inductor Generators for Ignition purposes,

Number 948,483, issued February 8th, 1910, Inductor Generators for Ignition purposes,

Number 1,003,649, issued September 19th, 1911, Inductor Generators for Ignition purposes,

And Whereas the party of the second part is desirous of securing exclusive right and license to manufacture, use and sell the inventions and improvements, described and claimed in above said patents, all or any one of them, the validity of which is admitted, and to bring and maintain suits against infringers of the patent rights covering the said inventions, within and throughout the United States of America and 1081 Territories thereof, and for and during the life of any and all of the patents:

Now, Therefore, in consideration of One Dollar (\$1.00) by the party of the second part to the parties of the first part, in hand paid, and of the covenants, and agreements of the party of the second part hereinafter expressed and to be kept and performed, the parties of the first part do hereby grant unto the party of the second part the exclusive right and license to manufacture, use and sell the inventions or improvements, and each and every one of them, described, set forth and claimed in said patents, numbers 947,647, 948,483 and 1,003,649, within and throughout the United States of America and Territories and possession thereof, for and during the term

of said patents or any of them; and the parties of the first part agree that they have good right and lawful authority to grant said exclusive license, and that they have not heretofore parted with any right, license or privilege inconsistent therewith, and that they will not, while this exclusive license to the party of the second part is in force, make, use or sell said inventions or grant, or give permission to, or encourage, others to do so.

Second: The parties of the first part agree to and with the party of the second part that they and each of them will aid and assist the party of the second part in any suit or proceedings brought under any of the said patents, or for the infringement of any patents by reason of the manufacture, use or sale, by the party of the second part of the inventions described in said patents; provided, however, that said parties of the first part shall not be called upon to pay out or expend any money in any suit or proceeding relating to the said inventions, and the parties of the first part hereby appoint the attorney for the party of the second part as their agent and attorney for the purpose of joining them as parties complainant where necessary or desirable, in any suit which the party of the second part may wish to bring on account of the infringement of any of said Letters-patent, the said attorney for the party of the second part to have the power to execute as the attorney and agent of the parties of the first part any papers which may be necessary or convenient to the commencement and maintenance of any such suit, it being expressly understood and agreed, however, that the parties of the first part are not to be put to any expense or to be required to expend any moneys, on account of any such infringement suits to which they may be made parties complainant, and it is expressly understood and agreed, further, that the said parties of the first part shall be exempt from liability in damages or court costs resulting from any law suits in which the parties of the first part may thus be joined with the party of the second part, the party of the second part agreeing to assume the payment of any and all damages and court costs that may result from any such suit.

Third: The party of the second part agrees to mark each of the devices manufactured under this license agreement, with the words "Patented," with the surname of the inventors, and with the dates of any of the said patents containing claims readable upon such devices.

1084 Fourth: The party of the second part agrees to keep a correct account of all devices made and sold under this license, whether sold as a part of and attached to other machines or apparatus or not so attached, containing or embodying the above said improvements or inventions, or any of them which books of account shall be open to the inspection of the parties of the first part or their attorney or agent, at all reasonable times.

Fifth: The party of the second part further agrees to make quarterly reports, in writing, to the parties of the first part, said reports to cover the periods terminating respectively, upon the last days of September, December, March and June of each year, each report to be furnished within fifteen days from the termination of the period covered thereby, and showing the total number and selling prices of devices embodying the improvements shown and claimed in said patents or any of them, which it has sold and delivered as above stated, during the preceding quarter, which report, when required, shall be verified by the oath or affidavit of the president or some other officer of the Company or corporation comprising the party of the second part.

Sixth: The party of the second part agrees that it will on the day of each and every report, pay to the parties of the first part, jointly, as a royalty or license fee, five per cent (5%) of all moneys or the equivalent thereof, which they may have received or that may be due them from the sales of or in exchange for the said devices sold and delivered during the preceding quarter. It is further expressly understood and agreed that the said devices manufactured embodying 1084 the above improvements, or any of them are not to be sold for less than a fair and reasonable price, based upon manufacturing and trade conditions.

Seventh: If the party of the second part fails to keep accounts, make reports and pay royalties as hereinbefore provided, or if during the year ending upon the last day of September, 1914, the royalties agreed to be paid under this contract shall not amount to Twenty-five Hundred Dollars (\$2,500.00) or if during the year ending upon the last day of September in subsequent years, during the life of this contract, the royalties agreed to be paid under this contract shall not amount to Twenty-five Hundred Dollars (\$2,500.00), it be-

ing understood that in the event of any deficiency in the amount of royalties, earned as figured on the basis of sales made, the parties of the second part may make up any such deficiency so that the total amount paid at the end of each year shall not be less than twenty-five hundred dollars (\$2,500.00), or, if the party of the second part fails or refuses to take proper steps to stop infringements, if any there should be, and become known to it, or any of the claims of any of said patents, or if it should not manufacture and sell for use at least five thousand (5000) pieces of any or more of the herein said devices during each and every year of the life of this contract, then the parties of the first part shall have the right to give notice, in writing, to the party of the second part, of its default, specifying in the said notice the respect or particular in which said second party is claimed to be in default, and if said second party shall not, after the receipt of said notice, remedy such default within thirty days, if one there be, the parties of the first part, may, in case they so desire to do, thereupon terminate said license, by notice in writing, to the party of the second part, but such notice or termination shall not relieve the party of the second part from the payment of any and all royalties and guaranteed amounts accrued prior to the receipt of such notice of termination or such amounts as may have accrued prior to the termination of manufacture of said devices.

Eighth: The party of the second part agrees that it will diligently proceed in and about the business of making and offering for sale one or more of the inventions and improvements covered by this license; that it will advertise the same, and use all proper and reasonable efforts to create a demand therefor, and to supply the demand when created.

Finally: It is agreed that this agreement shall extend to and be binding upon the heirs, assigns and legal representatives of the parties of the first part, and the successors and assigns of the party of the second part.

In Witness Whereof, the parties of the first part have hereto set their hands and seals, and the party of the second part has caused its corporate name to be hereto signed by its President, and its corporate seal attested by its Secretary to

be hereunto affixed, all as of the day and year first above written.

(Signed) HENRY JOSEPH PODLESAK, (Seal)
 (Signed) EMIL PODLESAK, (Seal)
 (Signed) THE WEBSTER ELECTRIC CO., (Seal)
 By T. K. WEBSTER,
President.

Attest:

S. A. LOEB,
Acting Secretary.

Witnesses:

KATE DEMPSEY,
 ARTHUR L. SCHWARTZ.

1086

LICENSE AGREEMENT.

(Shop Right)

This Agreement, made and entered into this 5th day of February, 1914, by and between Emil Podlesak of Racine, Wisconsin, and Henry Joseph Podlesak, of Chicago, Illinois, hereinafter called the parties of the first part, and The Webster Electric Company, a corporation of the State of West Virginia, whose principal office is in the City of Chicago, County of Cook and State of Illinois, hereinafter called the party of the second part, Witnesseth:

That Whereas the parties of the first part having invented certain and various new and useful improvements in Ignition Devices for Gas Engines, for which they jointly own certain Letters Patent and pending applications for Letters Patent of the United States of America, described as follows:

No. 1,022,642, issued April 9, 1912, Low Tension Sparking Mechanism, (Henry J. Podlesak).

No. 1,055,076, issued March 4, 1913, Current Generators and Ignitors, (Emil Podlesak).

No. 1,056,360, issued March 18, 1913, Inductor Generators for Ignition purposes.

Application, Serial No. 734,143, filed November 29, 1912, Ignitor Devices for Explosive Engines.

Application, Serial No. 668,153, filed December 27, 1911, Magneto Machines.

Application, Serial No. 639,738, filed July 21, 1911, Magneto Machines:—

1087 And Whereas the party of the second part is desirous of securing a shopright and license to manufacture, use,

and sell the inventions and improvements, described and claimed in above said patents, and applications for patents, all or any one of them, the validity of which patents, granted to to be granted, is admitted, and to bring and maintain suits against infringers of the patents rights, covering the said inventions, within and throughout the United States of America and Territories thereof, and for and during the life of any and all of the patents, and patents that may be granted, on any of the applications described above, or any of them:

Now, Therefore, in consideration of One Dollar (\$1.00) by the party of the second part to the parties of the first part in hand paid, and of the covenants and agreements of the party of the second part, hereinafter expressed and to be kept and performed, the parties of the first part do hereby grant unto the party of the second part a shop right and license to manufacture, use, and sell the inventions or improvements, and each and every one of them, described, set forth or claimed in said patents, numbers 1,022,642, 1,055,076 and 1,056,360, and said applications, serial numbers 734,143, 668,153 and 639,738, and any division or divisions thereof, within and throughout the United States of America and Territories and Possessions thereof, for and during the term of said patents or any of them; and the parties of the first part agree that they have good right and lawful authority to grant the said shop
1088 right and license, and that they have not heretofore parted with any right, license or privilege inconsistent therewith, and that they will not, while this shop license to the party of the second part is in force, give or grant shop licenses to others to make, use or sell herein said inventions, expressly reserving, however, the right to themselves, to make, use and sell the hereinsaid inventions.

Second: The parties of the first part agree to and with the party of the second part that they, and each of them will aid and assist each other in the prosecution of said applications and the obtaining of patents thereon and in any interference proceeding relating to their right of priority to said inventions, and in any suit or proceeding brought under any of the said patents or for the infringement of any patents by reason of the manufacture, use or sale, by the party of the second part of the inventions described in said patents or applications; provided, however, that said parties of the first part shall not be called upon to pay out or expend any money in any suit or proceeding relating to the said inventions, and the parties of the first part hereby appoint the attor-

ney for the party of the second part as their agent and attorney for the purpose of joining them as parties complainant where necessary or desirable, in any suit which the party of the second part may wish to bring on account of the infringement of any of said Letters Patent or any patent which may be granted 1089 upon their aforesaid applications, the said attorney for the party of the second part to have the power to execute as the attorney and agent of the parties of the first part any papers which may be necessary or convenient to the commencement and maintenance of any such suit, it being expressly understood and agreed, however, that the parties of the first part are not to be put to any expense or to be required to expend any moneys, on account of any such infringement suits to which they may be made parties complainant, and it is expressly understood and agreed, further, that the said parties of the first part shall be exempt from liability in damages or court costs resulting from any law suits in which the parties of the first part may thus be joined with the party of the second part, the party of the second part agreeing to assume the payment of any and all damages and court costs that may result from any such suits.

Third: The party of the second part agrees to mark or label each of the devices manufactured under this license agreement in conformity with the provisions of Section 4900 United States Revised Statutes and with the surname of the inventors.

Fourth: The party of the second part agrees to keep a correct account of all devices made and sold under this license, whether sold as a part of and attached to other machines or apparatus or not so attached, containing or embodying the above said improvements, or inventions, or any of them, which books of account shall be open to the inspection of the parties of the first part of their attorney or agent at all reasonable times.

1090 Fifth: The party of the second part further agrees to make quarterly reports, in writing, to the parties of the first part, said reports to cover the periods terminating respectively upon the last days of September, December, March, and June of each year, each report to be furnished within fifteen days from the termination of the period covered thereby, and showing the total number of devices embodying the improvements shown and claimed in said patents granted or to be granted, or any of them, which it has sold and deliv-

ered as above stated, during the preceding quarter, which reports shall also show the names of the purchasers or devices embodying the inventions, or any of them, set forth and claimed in said patents, Nos. 1,022,642 and 1,055,076, and the number of such devices sold to each purchaser, and shall be verified by the oath or affidavit of the President or some other officer of the Company or corporation comprising the party of the second part, if so required by the parties of the first part.

Sixth: The party of the second part agrees that it will, except as hereinafter provided, use the devices manufactured under the shop license only in connection with, or for repairs to, the devices manufactured under license which is covered by the agreement made on February 5th, 1914, by which the parties of the first part give to the party of the second part the exclusive and sole right to manufacture ignition devices covered by patents, No. 947,647 of January 1091 25, 1910, Inductor Generators for Ignition Purposes,

No. 949,483 issued February 8, 1910, Inductor Generators for Ignition Purposes and No. 1,003,649, issued September 19, 1911, Inductor Generators for Ignition Purposes, and that whenever the devices covered by this shop right and license are made and sold and delivered not as a part of, or for use in connection with, the devices manufactured and sold under the aforesaid exclusive license dated February 5th, 1914, then the party of the second part agrees that it will on the day of each and every report pay to the parties of the first part, jointly, as a royalty or license fee, five per cent (5%) of all moneys or the equivalent thereof, which they may have received or that may be due them from the sales of or in exchange for the devices covered by this shop right and license sold and delivered during the preceding quarter. It is further expressly understood and agreed that the said devices manufactured embodying above improvements, or any of them, are not to be sold for less than a fair and reasonable price, based upon manufacturing and trade conditions.

Seventh: If the party of the second part shall fail to keep accounts, make reports, and pay royalties, all as hereinbefore provided, then the parties of the first part shall have the right to give notice, in writing, to the party of the second part, of its default, specifying in the said notice the respect or particular in which said second party is claimed to be in default,

and if said second party shall not within thirty (30) days 1092 after the receipt of said notice, remedy or remove said default, if one there be, the parties of the first part may, in case they so desire to do, thereupon terminate said license by notice, in writing, to the party of the second part, but such notice or termination shall not relieve the party of the second part from the payment of any and all royalties that may, as hereinbefore provided, have accrued prior to the receipt of such notice of termination or such amounts as may have accrued prior to the termination of manufacture of said devices.

Eighth: The party of the second part, with the approval, in writing, of the parties of the first part, shall have right to grant shop right or license for the manufacture, use and sale of devices embodying the inventions described and claimed in said patents No. 1,022,642 and No. 1,055,076, to makers of or dealers in, gas engine, and gas engine accessories, but such shop rights or licenses so granted by the party of the second part shall be on and with the same terms and limitations as hereinbefore set forth, namely: that the devices made under such shop right license shall be used only in connection with, or for repairs for or to, devices made under the hereinbefore mentioned patents No. 947,647,—948,483,—1,003,649 and 1,056,360, and any patents that may be granted on the hereinbefore mentioned applications, Serial Nos. 734,143, 668,153 and 639,738, or any of them, and in no other way. The parties of the first part may approve any such shop right or license, to be granted by the party of the second part, either by signing such shop right or license or by giving written 1093 approval, either personally or by attorney, or agent.

Ninth: The party of the second part agrees that it shall not permit or encourage other parties to manufacture, use, or sell devices covered by hereinbefore mentioned patents, or patents that may be granted on hereinsaid applications, or any of them, except as, and on terms and limitations hereinbefore set forth, relative to said shop licenses under patents No. 1,022,642 and No. 1,055,076. It is further agreed and understood that this shop license becomes terminated in the case or event the license given in the said agreement of February 5, 1914, becomes terminated by manner therein provided for.

Finally: It is agreed that this agreement shall extend to and be binding upon the heirs, assigns and legal representa-

tives of the parties of the first part, and the successors and assigns of the party of the second part.

In Witness Whereof, the parties of the first part have hereunto set their hands and seals, and the party of the second part has caused its corporate name to be hereto signed by its President, and its corporate seal, attested by its secretary, to be hereunto affixed, all as of the day and year first above written.

HENRY JOSEPH PODLESAK (Seal)

EMIL PODLESAK (Seal)

THE WEBSTER ELECTRIC COMPANY

By T. K. WEBSTER,
President.

Attest:

S. A. LOEB,
Acting Secretary.

Witnesses:

KATE DEMPSEY

ARTHUR L. SCHWARTZ.

1094 That the inventions referred to and covered by the patents referred to in the foregoing agreements are the inventions embodied in the product manufactured by the plaintiff as hereinabove set forth.

That by virtue of the foregoing agreements, to defendant and his said brother, Henry Joseph Podlesak covenanted and agreed with the plaintiff that they would not give or grant to anyone the right to make, use or sell the said inventions or any of them.

That the defendant and his said brother, in violation of their duty and obligations as set forth in the foregoing agreements, on or about the 4th day of September, 1915, made and entered into a certain agreement in writing with the Splitdorf Electric Company, a corporation organized and existing under the laws of the State of New Jersey, and the Sumter Electrical Company, a corporation organized and existing under the laws of the State of South Carolina, which said agreement is in words and figures as follows:

1095 Memorandum of agreement made and entered into this 4th day of September, A. D. 1915, by and between Emil Podlesak of Racine, Wisconsin, and Henry Joseph Podlesak of Chicago, Illinois, parties of the first part, and the Splitdorf Electric Company, a corporation organized and existing under the laws of the State of New Jersey, having its

principal office and place of business located in the City of Newark, County of Essex, in said State, and the Sumter Electrical Company, a corporation, organized and existing under the laws of the State of South Carolina, having its principal office and place of business in the City of Sumter County of Sumter, in said State, said corporations jointly parties of the second part;

Whereas the parties of the first part are the present joint owners of certain inventions relating to inductor electric generators for internal combustion motor ignition, and of certain letters patent granted therefor as follows: No. 949,647, issued January 25, 1910; No. 948,483, issued February 8, 1910; and 1,003,649, issued September 19, 1911, all for Inductor Generators for Ignition purposes; and of certain other inventions relating to ignition devices for gas engines, for which applications have been filed and letters patent have been granted as follows: No. 1,022,642, issued April 9, 1912, Low Tension Sparking Mechanism; No. 1,055,076, issued March 4, 1913, reissued February 9, 1915, as No. 13,878, for Current Generators and Ignitors; No. 1,056,360, issued March 18, 1913, for Inductor Generators for Ignition Purposes; applications serial No. 734,143, filed November 29, 1912, for Igniter Devices for Explosive Engines, patented June 30, 1914, as No. 1,101,956; application serial No. 639,738, 1096 filed July 21, 1911, Magneto Machine, patented May 26, 1914, as No. 1,098,052, application serial No. 668,153, filed December 27, 1911, as a division of original application No. 639,738, patented June 2, 1914, as No. 1,098,754; and application serial No. 668,153, filed December 27, 1911, Magneto Machines, patented as No. 1,109,754; and

Whereas said parties of the first part have heretofore granted licenses under said patents to the Webster Electric Company of Racine, Wisconsin, as evidenced by three certain written instruments dated respectively the 5th day of February 1914, the 5th day of February, 1914, and the 20th day of January 1915, of which true copies are hereto annexed and marked respectively Exhibits, A. B. and C; and

Whereas the parties of the second part having been nominated by F. C. Manning under his option dated August 20, 1915, and being his assignees thereof, are desirous of acquiring the entire interest in the aforesaid inventions, letters patent and applications, together with all rights to manufacture, use and sell said inventions subject only to the

said licenses heretofore granted to the Webster Electric Company, also the entire interest of the parties of the first part in the aforesaid agreements with the said Webster Electric Company and in the business of manufacturing and selling magneto ignition apparatus for internal combustion engines, together with the good will appertaining to the said business of the parties of the first part, in part represented by the association of their names or either of them with said business or with apparatus manufactured or to be manufactured and sold under the aforesaid letters patent and applications on said agreements; also all reissues granted or to be granted or said letters patent and patents granted 1097 on said applications, as well as any improvements on said inventions, the applications and patents therefor.

Now therefore be it known that for and in consideration of the sum of Twenty-five Thousand Dollars (\$25,000.00) to them in hand paid, the receipt of which is hereby acknowledged, and for the further considerations hereinafter set forth, the parties of the first part have sold, assigned, transferred, set over and conveyed, and by these presents do hereby sell, assign, transfer, set over and convey unto the parties of the second part jointly, the entire right, title and interest in, to and under each and every the hereinbefore mentioned inventions and improvements, letters patent, and applications for letters patent, with all divisions, reissues and extensions thereof, including the right to use and recover to their own use for infringement of the same, whether committed before or after the date hereof, this assignment being subject only to the licenses heretofore granted to the Webster Electric Company, also the entire right, title and interest in, to and under or arising out of the aforesaid license agreements with the Webster Electric Company, and the royalties and other profits flowing therefrom after the date hereof, as well as the entire interest and good will of the parties of the first part in the business of manufacturing and selling magneto ignition apparatus for internal combustion engines and any other apparatus described or claimed in said letters patent and applications and included in said license agreements; the same to be held and enjoyed by the said parties of the second part, or the survivor of them, their or its successors or assigns, as fully, freely and 1098 entirely as they might have been held and enjoyed by the parties of the first part had not this assignment and sale thereof been made.

It is understood and agreed that the preparation and the prosecution of all applications for patents on inventions hereby conveyed or agreed to be conveyed, including both pending and new applications, original, divisions, reissue, and extension, shall be by the attorney or attorneys for the parties of the second part, on their designation, and the parties of the first part hereby appoint said attorneys as their attorneys for such purpose, and agree that they will at all times keep the parties of the second part or their said attorneys fully informed as to inventions they may make which might fall within the terms of this agreement, and that they will at all times aid and assist in the preparations and prosecution of said applications, and in any proceedings ancillary thereto, all, however, without expense to themselves for costs or attorneys' fees, said expense to be borne entirely by the parties of the second part. The parties of the first part also agree that upon demand of the parties of the second part or said designated attorneys, they will execute assignments satisfactory to said attorneys of all said inventions and improvements not herein specifically designated but included within the scope hereof.

In further consideration of the said transfer and the faithful performance by the parties of the first part of the covenants herein contained, the parties of the second part for themselves, their survivor, successors or assigns, agree to pay an additional sum of Forty Thousand Dollars (\$40,000.00) in four equal installments of Ten Thousand 1099 Dollars (\$10,000.00) each payable one installment on the first day of each of the years 1916, 1917, 1918 and 1919.

In further consideration of the payment to them made, which includes a special sum of Five Thousand Dollars (\$5,000.00) for this purpose, which said sum is deemed by the parties hereto to be adequate in the premises, and as ancillary to the foregoing assignment and sale, and in order to protect the parties of the second part, their survivor, successors and assigns in the full and complete realization and enjoyment of the rights, title and interest thus conveyed, the parties of the first part do hereby jointly and severally covenant and agree that they and each of them shall not engage in the manufacture or sale of magneto ignition apparatus for internal combustion engines for and during the period of five years from and after the date of these presents, throughout the territory covered and included within the monopoly granted by the aforesaid letters patent, it being the intention

of the parties hereto that the field of business of the parties of the second part includes the whole of and is co-extensive with said territory.

It is understood and agreed that nothing in this covenant shall operate to prevent the parties of the first part from engaging in business involving either the use of a magneto generator for other purposes than internal combustion engine ignition, or involving the accomplishment of internal combustion engine ignition by other means than magneto generator or dynamo; provided said business does not involve any infringement upon any claims of the patents hereby assigned or agreed to be assigned to the parties of the second part, the validity of which is expressly admitted and warranted by the parties of the first part. It is further

1100 understood and agreed that in the event of any breach of this covenant not to compete by the parties of the first part or either of them, they shall thereupon become jointly and severally liable to the parties of the second part in the sum of Five Thousand Dollars (\$5,000.00) as liquidated damages, and in addition thereto for all actual damages in excess thereof, sustained by the said parties of the second part, their survivor, successors or assigns, by reason of said breach, such damage to be assessed and determined by a court of proper jurisdiction and pending such determination all sums remaining in the hands of the parties of the second part and which would otherwise be due and payable under this agreement to the parties of the first part to be retained by the parties of the second part as security for the payment of the aforesaid damages.

The parties of the first part hereby warrant that they have the right to manufacture, use and sell the inventions described and claimed in letters patent No. 1,022,642 April 9, 1912, No. 1,055,076, March 4, 1913, reissued February 9, 1915 as No. 13,878, and 1,056,360, March 18, 1913, also applications serial No. 734,143, filed November 29, 1912, serial No. 668,153, filed December 27, 1911, and serial No. 639,738, filed July 21, 1911; that they are the owners of the said letters patent, and also of all the other letters patent and inventions mentioned in the aforesaid agreements with the Webster Electric Company, Exhibits A, B and C; that they have the right to make this assignment, including all of said patents and agreements; that they have not previously made any assignment or granted any license, shop right or other rights of any kind or character, of, to, in or under the aforesaid patents, saving and

excepting only the rights granted under agreements Exhibits A and B to the Webster Electric Company, and that 1101 when they made and entered into said agreements with the said Webster Electric Company, it was understood and agreed on the part of the Webster Electric Company that the parties of the first part hereto reserved and retained to and in themselves all the rights, title and interest herein and hereby warranted and that the same were assignable by the parties of the first part at their own will and pleasure.

It is understood and agreed that this contract is made under and to be construed according to the laws of the State of New Jersey, and is fully executed and delivered in the City of Newark, in said State.

In witness whereof the parties of the first part have hereunto severally subscribed their names and affixed their seals in triplicate this 4th day of September, A. D. 1915; and the parties of the second part have severally caused their names to be signed and their corporate seals to be affixed hereto at the times and places indicated below, by their respective officers to that end duly empowered.

(Signed) HENRY J. PODLESAK (Seal)
(Signed) EMIL PODLESAK (Seal)

SPLITDORF ELECTRIC COMPANY

By _____
President.

Place _____
Date _____

Attest:

Secretary.

SUMTER ELECTRICAL COMPANY

By _____
President.

Place _____
Date _____

Attest:

Secretary.

City of Washington, }
District of Columbia, } ss

On this 4th day of September, 1915, before me personally appeared Emil Podlesak and Henry Joseph Podlesak, to me known to be the persons described in and who executed the foregoing instrument and acknowledged that they executed the same as their free act and deed.

.....
Notary Public.

County of }
State of } ss

I, a Notary Public in and for said County in said State, hereby certify that whose name as President of the Splittorf Electric Company, a corporation, is signed to the foregoing conveyance, and who is known to me, acknowledged before me on this day that, being informed of the contents 1103 of the conveyance, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation. Given under my hand this day of September, 1915.

.....
Notary Public.

State of }
County of } ss

I, a Notary Public in and for said County in said State, hereby certify that Charles Thomas Mason, whose name as President of the Sumter Electrical Company, a corporation, is signed to the foregoing conveyance, and who is known to me, acknowledged before me on this day that, being informed of the contents of the conveyance, he, as such officer and with full authority, executed the same voluntarily for and as the act of said corporation. Given under my hand this day of September, 1915.

.....
Notary Public.

1104 That said Splittorf Electric Company and Sumter Electrical Company, were at the time said agreement was made, competitors of the plaintiff, and the defendant and his said brother, by making and entering into said agreement with said companies violated their duties and obligations under their said agreements of February 5, 1914, with the plaintiff, and thereby the plaintiff has been damaged and continues to be damaged in a very large amount of money, the exact amount of which the plaintiff cannot at this time state, but asks to have said damages assessed herein.

LEVINSON, BECKER, CLEVELAND & SCHWARTZ,
Attorneys for Plaintiff.
76 W. Monroe Street,
Business address.

State of Illinois }
County of Cook } ss
City of Chicago, }

Walter Brown, being first duly sworn, on oath states that he is the Vice-President of the plaintiff in the above entitled cause; that the said cause is a suit upon contract for the payment of money; that the nature of the plaintiff's demand is as set forth in the foregoing statement of claim and that the amount due the plaintiff for its damages in unliquidated and unascertained and for that reason the plaintiff cannot tell the exact amount of such damages, but asks that the same be assessed in this proceeding.

WALTER BROWN,

Subscribed and sworn to before me this 26th day of December, 1915.

(Seal) JEROME N. FRANK,
Notary Public in and for Cook County, Illinois.
(Endorsed) Filed Dec. 28, 1915, T. C. MacMillan, Clerk.

1106

DEFTS. EX. 75. E. O. E.

IN THE DISTRICT COURT OF THE UNITED STATES

For the Northern District of Illinois,

Eastern Division

Webster Electric Company, a corporation, under the laws of West Virginia,

Plaintiff,

} Law No. 32313.

vs

Tesla Emil Podlesak,

Defendant,

Whereas all matters in difference, including the above entitled action, have been amicably settled and adjusted, and mutual releases having been duly executed and delivered, by and between the parties above named,

Now, therefore, it is hereby stipulated and agreed by and between the parties hereto, through their respective attorneys, that the above entitled action has been fully settled and all claims of the plaintiff therein satisfied; that said action be and the same hereby is dismissed without costs to either or any of the parties, and that an order of dismissal be entered on the application of any party pursuant to this stipulation, without other or further notice.

Dated, January 16th, 1918.

LEVINSON, BECKER, & SCHWARTZ,
Attorneys for Plaintiff.

PARKER & KING,
Attorneys for Defendant.

On reading and filing the above stipulation, it is ordered that said action be and the same hereby is dismissed pursuant thereto, without costs to either party.

(Endorsed) Filed Jan. 25, 1918, T. C. MacMillan, Clerk.

740

Defendants' Exhibit No. 76.

1108

DEFTS. EX. 76, E. O. E.

Friday, Jan. 25, 1918.

Carpenter, J.

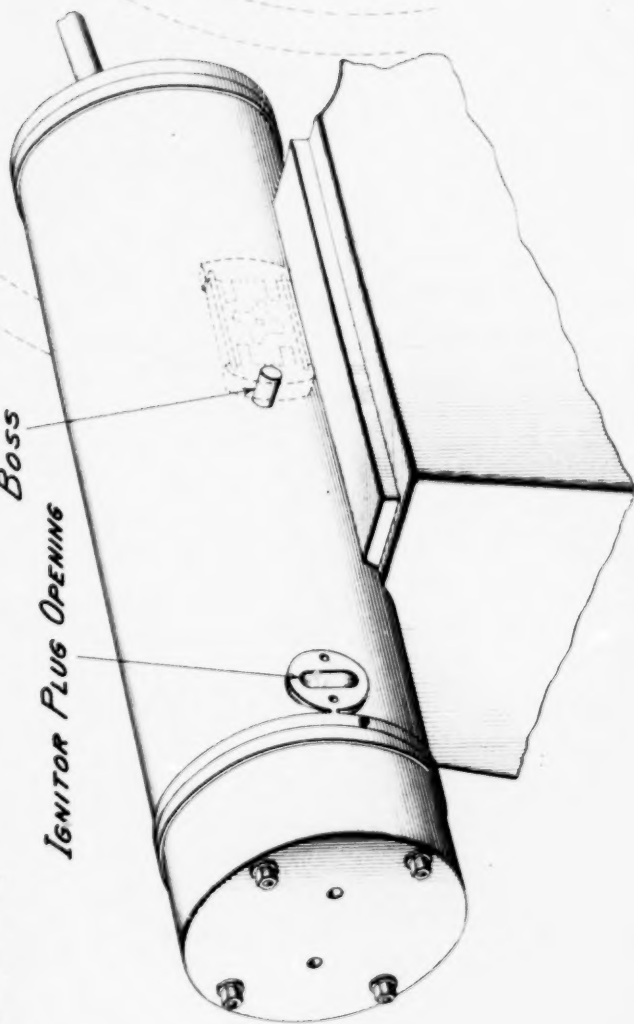
Webster Electric Company, }
 vs 32313.
Tesla Emil Podlesak, }

Upon stipulation of the respective parties, this day filed herein, it is ordered by the Court that the above entitled cause be and the same hereby is dismissed without costs to either party.

Webster Electric Co. } In Equity
vs
Henry J. Podlesak et al. } No. 553.

BOSS

IGNITOR PLUG OPENING

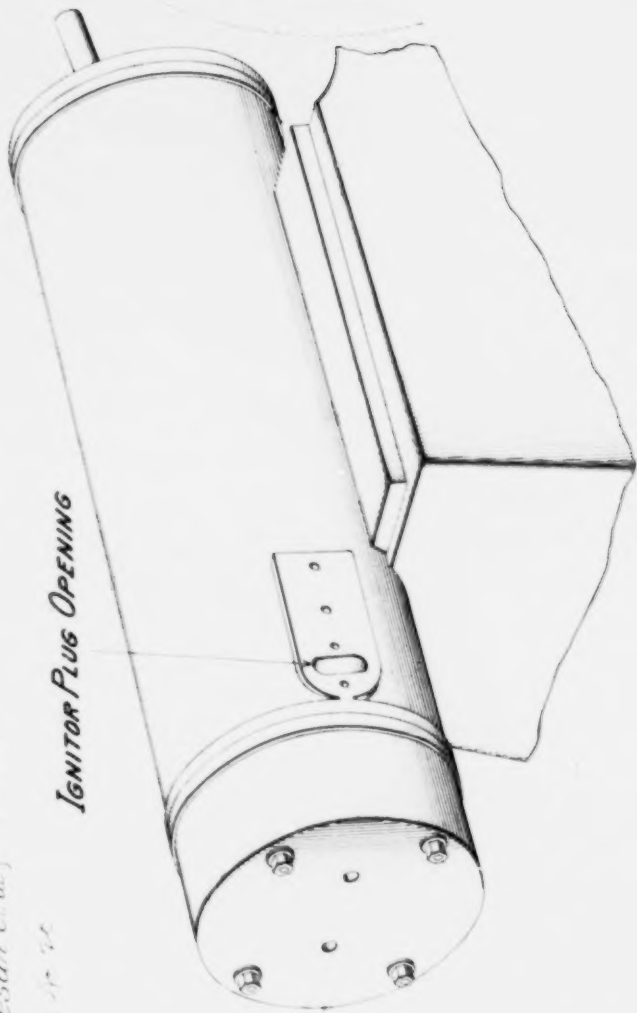


Patented May 19, 1903
Inventor: Henry J. Podleski et al.

Webster Electric Co. }
vs }
Henry J. Podleski et al. }

274 54 50 51

IGNITOR PLUG OPENING



Defendants Exhibit No 51.

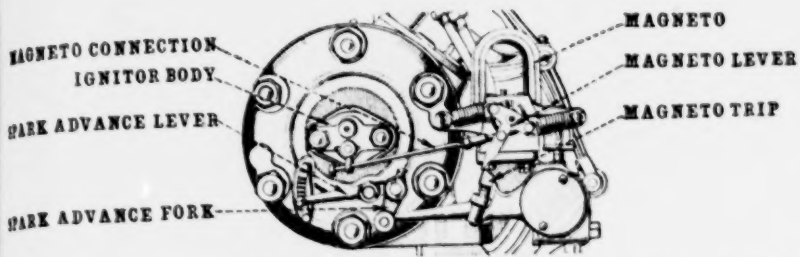


Illustration No. 5 — Showing Spark Advance Lever in Retarded or Starting Position; Magneto Lever about to be tripped

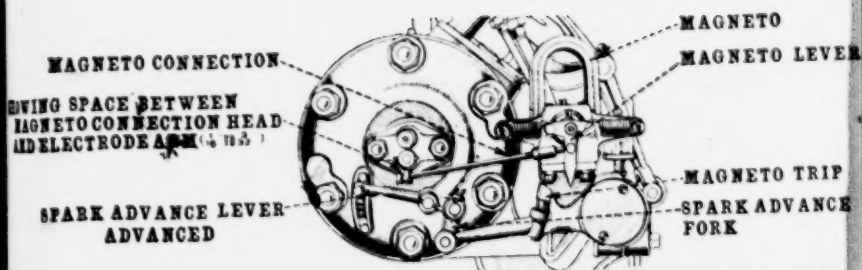


Illustration No. 6 — Showing Spark Advance Lever advanced to Running Position; Magneto Lever in Normal Position when Engine is at rest.

No. 635,506.

R. E. OLDS.

Patented Oct. 24, 1899.

ELECTRIC IGNITER FOR GAS ENGINES.

(Application filed Apr. 20, 1898.)

(No Model.)

2 Sheets—Sheet 1.

Fig 2.

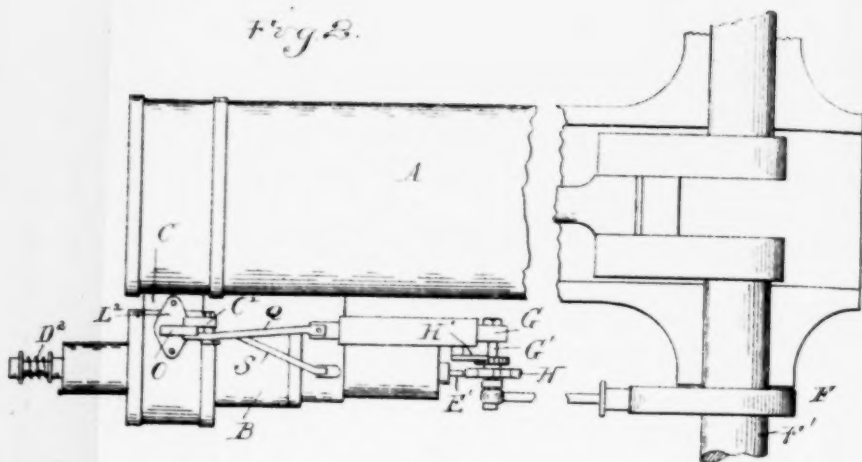
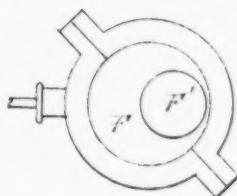
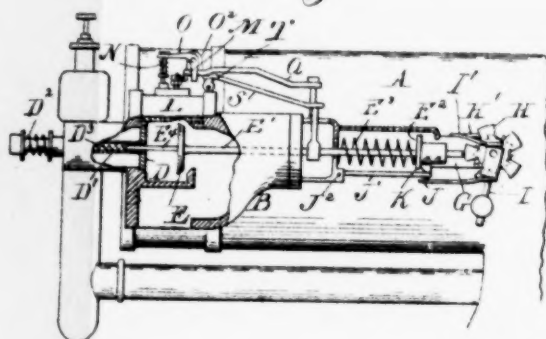


Fig 1.



Witnesses
Chas. A. Baskin
Samuel B. Baskin

Inventor
Ransom E. Olds.
 By *W. H. Maguire Esq.*
 Att'y

No. 635,506.

R. E. OLDS.

Patented Oct. 24, 1899.

ELECTRIC IGNITER FOR GAS ENGINES.

(Application filed Apr. 20, 1898.)

(No Model.)

2 Sheets—Sheet 2.

Fig. 3.

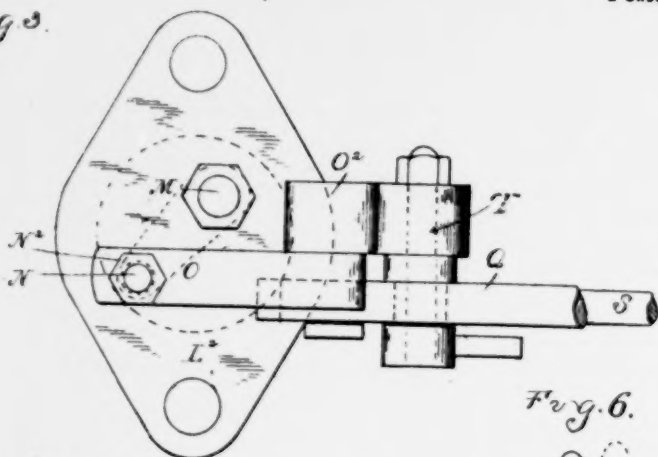


Fig. 6.

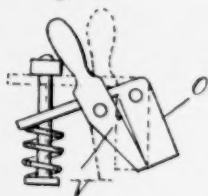


Fig. 4.

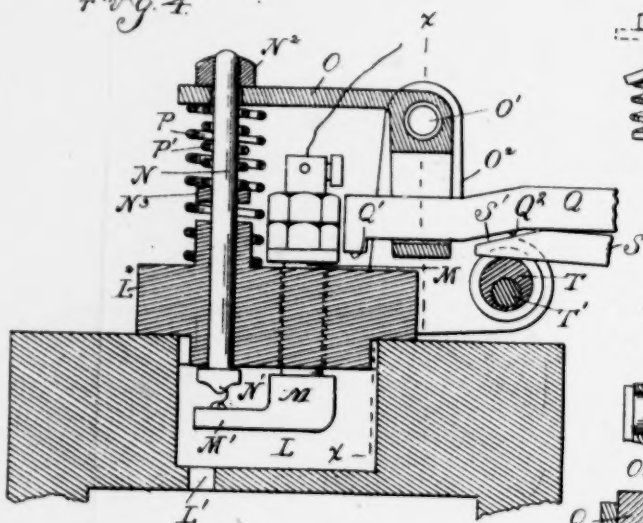
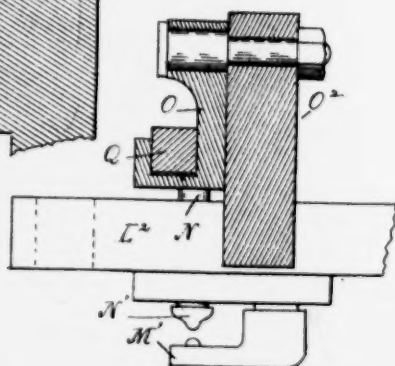


Fig. 5.



Witnesses
John H. Smith
Sam. Patterson

Inventor
 Ransom E. Olds
 By *Thos. Sprague* Son
 Attys.

UNITED STATES PATENT OFFICE.

RANSOM E. OLDS, OF LANSING, MICHIGAN.

ELECTRIC IGNITER FOR GAS-ENGINES.

SPECIFICATION forming part of Letters Patent No. 635,506, dated October 24, 1899.

Application filed April 20, 1898. Serial No. 672,222. (No model.)

To all whom it may concern:

Be it known that I, RANSOM E. OLDS, a citizen of the United States, residing at Lansing, in the county of Ingham and State of Michigan, have invented certain new and useful improvements in Electric Igniters for Gas or Hydrocarbon Engines, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to an improved construction of an electric igniter and to means for governing the production of the spark, whereby in engines where the gas admission into the cylinder is under the control of a regulator no spark will be produced when the gas is not admitted, as will be the case when the engine exceeds its normal rate of speed.

To this end my invention consists in the peculiar construction, arrangement, and operation of a fixed and a movable electrode provided with means for actuating said movable contact by the movement of the engine, and, further, in a regulating device whereby said movement is controlled by the movement of the exhaust-valve, all as more fully hereinafter described, and shown in the drawings, in which—

Figure 1 is a side elevation, partly in section, of a gas-engine to which my invention is shown applied. Fig. 2 is a plan thereof. Fig. 3 is an enlarged plan of the electrical igniter. Fig. 4 is a vertical section thereof. Fig. 5 is a section on line *x x*, Fig. 4.

The engine represented in the drawings and to which my present invention is shown to be applied is the one described in United States Letters Patent No. 565,786. Briefly described, its construction and operation are as follows:

A is the cylinder.

B is the valve-chest.

C is a passage leading from the valve-chest into the cylinder.

D is the inlet-valve, controlling the inflow of the vapor from the valve-chest into the passage C, and E is the exhaust-valve, controlling the outflow of the exhaust from the passage C, through the valve-chest, into the atmosphere. The exhaust-valve E is secured upon a valve-stem E', which carries a collar E², and a spring E³ upon this valve-stem tends to automatically seat the exhaust-valve. The

induction-valve D has a valve-stem D', which carries a coil-spring D², arranged to automatically seat the induction-valve. The valves D and E are placed opposite each other and move in opposite directions to open and close their respective ports. The exhaust-valve controls the opening of the inlet-valve by means of an extension E⁴ of its valve-stem projecting loosely into the valve-stem D' and abutting against a spring D³ seated therein.

The exhaust-valve is operated by an eccentric F on the engine-shaft F', which reciprocatingly actuates a slide G, carrying on a shaft G' a notched wheel H, so arranged that at every reciprocation of the shaft a dog H', acting through a ratchet on the wheel H, causes this wheel to turn intermittently and alternately present its full face or a notch against the end of the valve-stem E', and thereby causing the opening of the exhaust-valve at every other stroke only, as required by the operation of this type of engine.

The induction-valve is opened by the suction created in the cylinder by the movement of the piston, and it is automatically closed after induction has taken place by the spring D². When the exhaust-valve is open, however, its stem E⁴ compresses the spring D³, and thereby prevents any opening of the induction-valve. The opening of the latter is therefore dependent upon the closing of the exhaust-valve. Based upon this relation of the two valves a regulating device is provided whereby the induction-valve does not open when the engine exceeds its normal speed. To this end the slide G carries a pendulum-weight I, which is prevented from vibrating freely by a spring I' pressing against the squared upper end of the pendulum-rod. This pendulum carries an arm J, extending just below a latch-bar J', pivotally secured at J² and adapted to engage with a projecting shoulder K on the fixed collar E², all arranged that when the engine is going at too great a speed the pendulous movement of the weight I lifts the latch-bar J', through the medium of the arm J, sufficiently to engage the shoulder K, as shown in Fig. 1, and thereby prevent the exhaust-valve from closing, as in the normal operation of the engine, and the induction-valve in turn therefore remains

closed and no induction of gas takes place until the engine has slowed down to its normal speed.

My invention is applied to this engine in the following manner: L is the igniting-chamber, communicating through a passage L' with the cylinder, and L² is a cover removably closing the top of this chamber. In this cover is secured, suitably insulated therefrom, the fixed electrode M, to which one terminal of the electric circuit for producing the spark is connected. N is the other electrode. This extends through a guide-bearing in the cover oppositely to an arm M' on the fixed electrode. The electrode N is provided at its lower end with an enlargement or stop N', and at its upper end it has a head or stop N², and O is a bell-crank pivotally secured at O' to a standard O² and engaging with the electrode N. The electrode N has two coil-springs P P', the former interposed between the bell-crank and the cover and the latter between the bell-crank and a stop or collar N³ on the electrode. The other arm of the bell-crank is formed with a guide-bearing, through which loosely slides the free end of an arm Q, which is provided with the hook Q'. The opposite end of the arm Q is connected to a slide G, which in turn is secured to the rod of the shaft G', all so arranged that the arm Q partakes in the reciprocating movement of the eccentric F. Beneath the arm Q is located another arm S, the free end of which is supported by an eccentric rest T, while its opposite end is connected to the stem of the exhaust-valve, and consequently partakes in the movement of said valve. The free end of this arm is provided with a bevel S', and a corresponding bevel Q² is formed on the under side of the arm Q.

In practice the igniter being arranged and constructed as shown and described it is intended to operate as follows: In the forward movement of the eccentric F the arm Q will be carried in the same direction and cause its hook Q' to engage the bell-crank O and rock the same on its pivot. The rock-arm pressing on the spring P' will thus push the electrode N into the gas-chamber into contact with the electrode M', and a further movement of the bell-crank will merely compress the springs P and P' until the bevel Q² of the arm Q will strike the bevel S' of the arm S, and thereby lift the arm Q and disengage its hook from the bell-crank. At this movement the spring P, being under compression, will instantly react and cause the free arm of the bell-crank to fly against the head N', which acts as a stop, and thereby causes a sudden separation of the electrodes, which causes the production of the igniting-spark. In the normal operation the spark, however, will be produced only at every other revolution of the shaft F', as by the opening of the exhaust-valve in the succeeding revolution of the shaft the arm S, which moves with it, is carried forward enough to cause its bevel to lift the arm

Q and disengage it from the bell-crank, that it cannot actuate the bell-crank to produce a spark. The same thing of course will take place when by the action of the regulator the exhaust-valve is prevented from closing, as it will do when the engine exceeds its prescribed rate of speed, and thus the regulator prevents the production of a spark when there is no gas to explode, and consequently the battery-power is not wasted, as it would be otherwise. The spring P' being normally compressed draws the head N' of the removable electrode tight against the under side of the cover, and thereby prevents any gas from leaking out, and with the adjustments provided for both electrodes, any wear may be taken up.

T is an eccentric adjustably sleeved upon the screw-bolt T', which is secured to a standard O². This eccentric forms a vertical adjustable rest for the arm 3, and by its adjustment the point of ignition may be easily regulated.

In the drawings I have shown handle or lever V for actuating the bell-crank O by hand in starting the engine.

What I claim as my invention is—

1. In an electric igniter, the combination of a fixed electrode, a longitudinally-sliding electrode provided with two stops, an actuating-lever, one arm of which loosely engages said electrode between said stops, a spring interposed between the lever and one of said stops, a spring urging the lever in one direction and means for actuating said lever in the other direction and suddenly releasing the same.

2. In an electric igniter, the combination of a fixed electrode, a longitudinally-sliding electrode, a stop therefor to limit its movement from the fixed electrode, an actuating lever, one arm of which loosely engages said electrode, two stops on the sliding electrode for actuating the same in opposite directions by the movement of said arm of the lever, a spring interposed between said arm and one of said stops, a spring urging said lever in one direction, and a hooked arm loosely engaging with the other arm of the lever and adapted to actuate said lever in the other direction.

3. In an electric igniter, the combination with the ignition-chamber and fixed electrode inclosed within said chamber, of a longitudinally-sliding electrode projecting into said chamber and adapted to contact with the fixed electrode, a stop on the outer end of said sliding electrode, a lever, one arm of which loosely engages said sliding electrode beneath said stop, a stop on the electrode beneath said arm of the lever, a spring interposed between said arm and last-mentioned stop, a spring urging the lever to withdraw the sliding electrode from contact with the fixed electrode, a stop on the lower end of the sliding electrode to limit the movement of said lever, and means for actuating the lever.

4. In an electric igniter, the combination with the ignition-chamber and fixed electrode inclosed therein and provided with an arm, of a longitudinally-sliding electrode projecting into said chamber, a stop on the lower end of said electrode within the ignition-chamber, a bell-crank lever, one arm of which loosely engages said sliding electrode, two stops on said sliding electrode, one above and one below said arm of the lever, a spring interposed between the last-named stop and the arm of the lever, a spring adapted to urge said lever in one direction and a reciprocating arm loosely engaging the other arm of the lever and provided with a hook for actuating the lever.

5. In an electric igniter, the combination with the ignition-chamber and fixed electrode inclosed therein, of the sliding electrode N provided at its lower end with the enlargement or stop N' inclosed within the ignition-chamber and adapted to seat against the wall thereof, the stops N² N³ on said sliding electrode, the lever O, one arm of which engages loosely with the sliding electrode between said stops, the spring P' interposed between said lever and the stop N³, the spring P urging the lever in one direction, the reciprocating arm Q engaging in a guide-bearing on the other arm of the lever and provided with the hook Q' and means for releasing said hook from the lever.

6. In an electric igniter, the combination with the movable electrode and the lever arranged to move said electrode in one direction, an arm operated by the engine to actuate said lever in said direction, means automatically controlled by the movement of the exhaust-valve to release said arm from the lever and a spring to automatically move the lever in the other direction when released.

7. In a gas-engine, having its exhaust-valve controlled by a regulator, the combination of an electric igniter having its movable contact

operated by a connection with a movable part of the engine, and means for controlling said connection by the movement of the exhaust-valve.

8. In a gas-engine having an automatically-operating inlet-valve and an automatically-closing exhaust-valve controlling said inlet-valve, the combination with a regulator controlling the closing of the exhaust-valve, of an electric igniting device operated by the movement of the engine, and means operated by the movement of the exhaust-valve for controlling the igniting device.

9. In a gas-engine, the combination of an automatically-operating inlet-valve, an automatically-closing exhaust-valve controlling said inlet-valve, a regulator controlling the closing of said exhaust-valve, an electric igniter having a movable contact actuating connection for operating said contact by the movement of the engine, the hooked arm Q in said connection and the arm S connected to the stem of the exhaust-valve, said arms Q and S having the bevels Q' and S' operating to disconnect the arm Q under control of the exhaust-valve.

10. In a gas-engine igniter, the combination of the sliding electrode, the lever arranged to move said electrode in one direction, the spring actuating said lever in the other direction, the reciprocating arm Q, the hook on said arm adapting it to engage with and move said lever, the arm S operated by the movement of the exhaust-valve, the eccentric rest T supporting said arm, and the bevels Q' and S' on said arms operating to disengage the arm Q from the lever under the control of the exhaust-valve.

In testimony whereof I affix my signature in presence of two witnesses.

RANSOM E. OLDS.

Witnesses.

CHARLES F. HAMMOND
RALPH J. GARLICK.

No. 773,062.

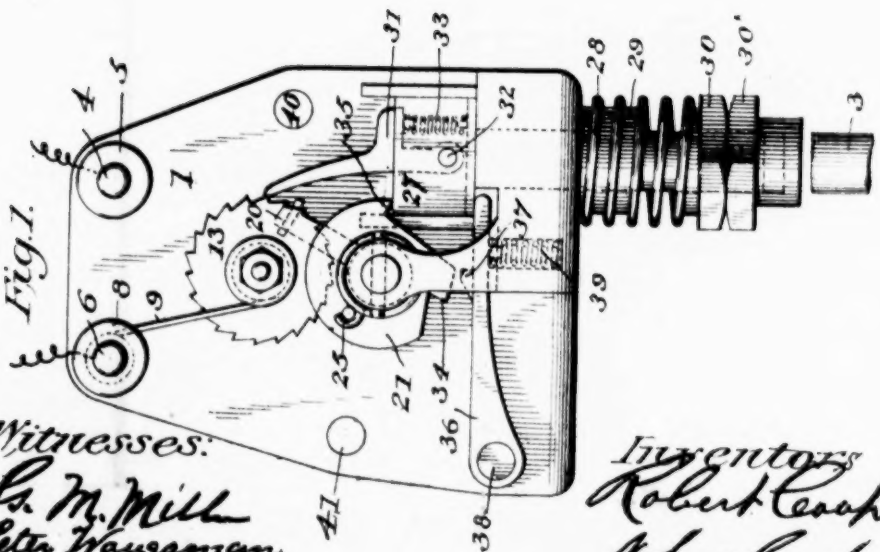
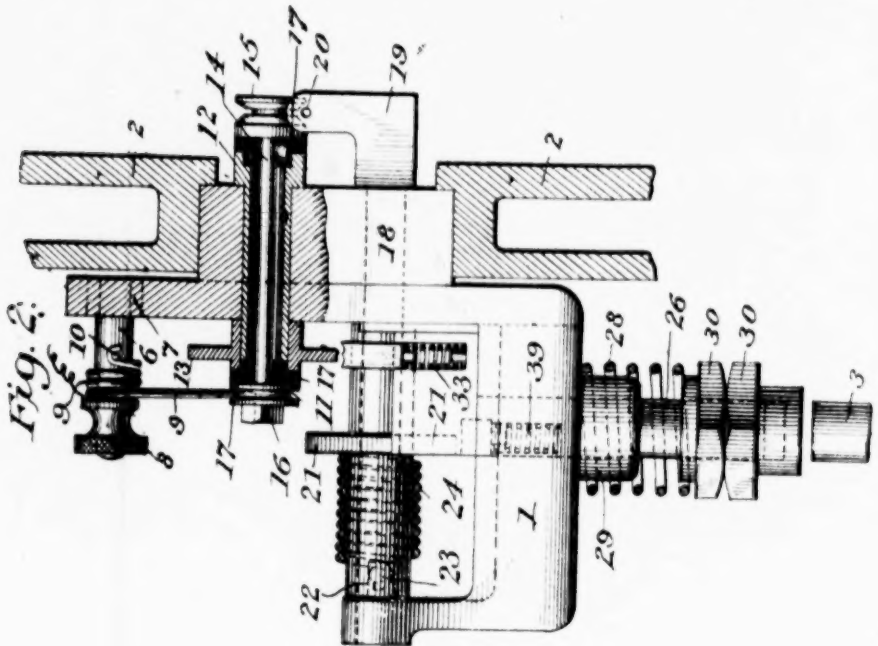
PATENTED OCT. 25, 1904.

R. & J. COOPER.
ELECTRIC IGNITER FOR GAS ENGINES.

APPLICATION FILED FEB. 14, 1902.

NO MODEL.

28 SHEETS—SHEET 1.



Witnesses:
L. M. Mill
Peter Waugaman

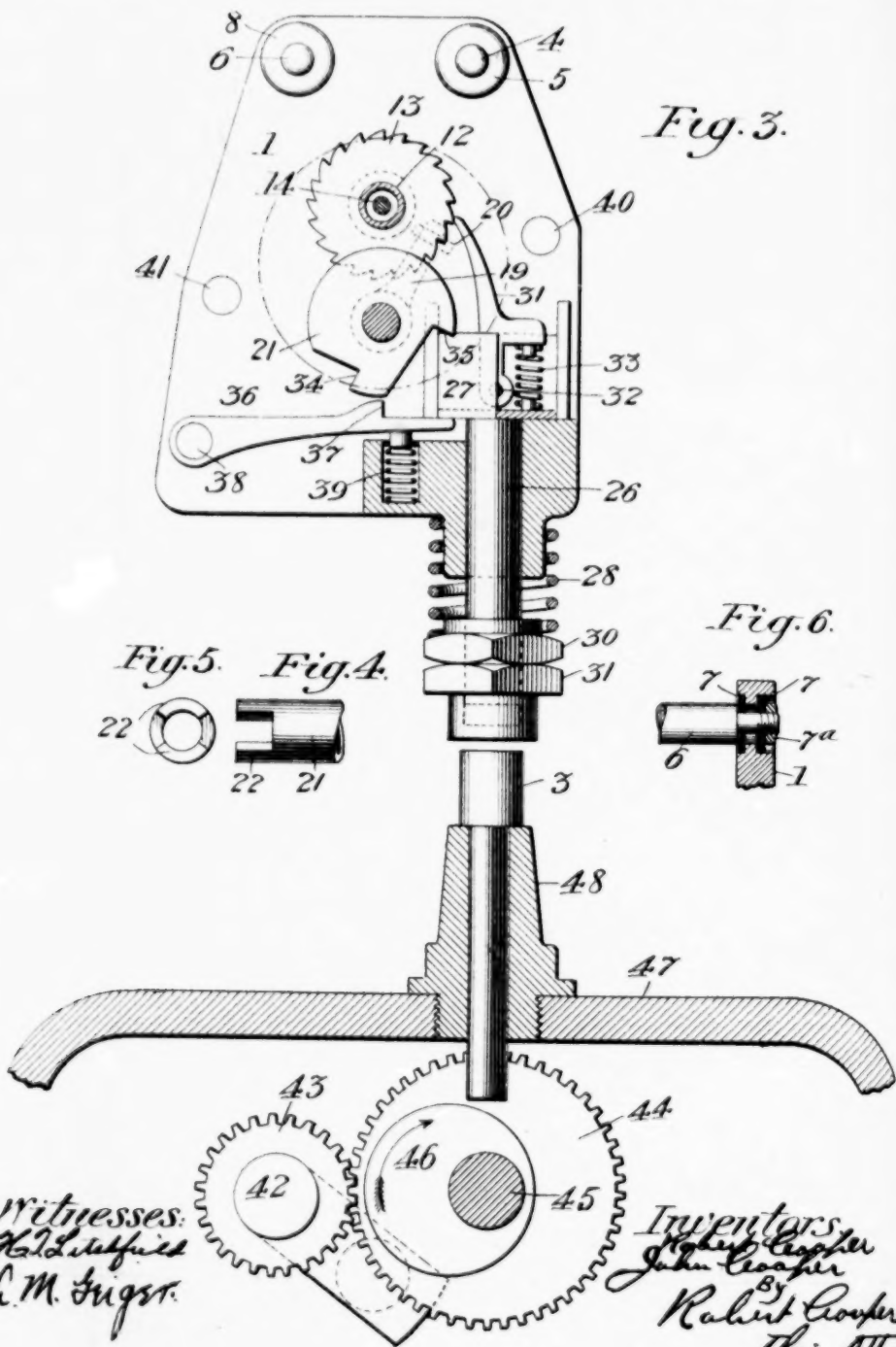
Inventors
Robert Cooper
John Cooper

R. & J. COOPER.
ELECTRIC IGNITER FOR GAS ENGINES.

APPLICATION FILED FEB. 14, 1902.

NO MODEL.

2 SHEETS—SHEET 2.



Witnesses:
H. L. Luffield
C. M. Fugate

Inventors:
Robert Cooper
John Cooper
By Robert Cooper
Thos. A. Hy.

UNITED STATES PATENT OFFICE.

ROBERT COOPER AND JOHN COOPER, OF SALTSBURG, PENNSYLVANIA.

ELECTRIC IGNITER FOR GAS-ENGINES.

SPECIFICATION forming part of Letters Patent No. 773,062, dated October 25, 1904.

Application filed February 14, 1902. Serial No. 94,052. (No model.)

To all whom it may concern:

Be it known that we, ROBERT COOPER and JOHN COOPER, citizens of the United States, residing at Saltsburg, Indiana county, Pennsylvania, have invented new and useful Improvements in Igniting Devices for Explosive-Engines, of which the following is a specification.

Our invention relates to all classes of igniters for explosive-engines which produce a spark by the separation of electrodes within the combustion-chamber. In the more common form of this class of igniters the same points or parts of the electrodes are brought together in the same spot every time the circuit is closed and are liable to and do become sufficiently insulated as not to allow of sufficient current to be flowing in the circuit as will be necessary to cause a spark capable of igniting the charge when the electrodes are separated. This insulation may be due to corrosion caused by the intense heat of the contact points or parts of the electrodes or by some foreign substance getting between them. The object of our invention is to overcome these serious objections. This is accomplished by an improved arrangement, construction, and combination of parts whereby a good contact is insured every time the electrodes are brought together and whereby the wearing away of the contact points or parts of the electrodes will not materially effect the time of ignition.

We shall now more fully describe our invention with reference to the accompanying drawings, in which—

Figure 1 is an elevation of the igniter. Fig. 2 is an end elevation, part in section, of the same igniter. Fig. 3 is an elevation, part in section, of the igniter, also showing a portion of the engine and the way the igniter receives its motion from the crank-shaft. Fig. 4 is a portion of the disk 21, showing clutch 22. Fig. 5 is an end view of Fig. 4. Fig. 6 is an elevation, part in section, of the stud 6, showing the method of insulating it from the body of the igniter.

Similar figures refer to similar parts throughout the several views.

1 represents the frame or body of the igniter, which contains all the working parts. 50

2 shows a portion of the combustion-chamber to which the igniter may be attached.

3 is a reciprocating rod which imparts motion to the igniter. 55

4 is a stud to which one of the electric wires is attached by thumb-screw 5.

6 is a stud insulated from the igniter-body by bushing 7, composed of any insulating material fitted tightly into igniter-body, as shown. To stud 6 is fastened the other electric wire by means of thumb-nut 8. 60

7* is a nut on stud 6 to hold it in position.

A helical spring 9 passes over stud 6, one end of which is held from rotating by pin 10, and the other end presses against grooved disk 11. 65

12 is a hollow cylindrical shaft having a shoulder on the inner side which bears against the igniter-body 1 in such a manner as to form an air-tight seat. Said shaft 12 is free to rotate in igniter-body 1. 70

13 is a ratchet-wheel pressed on shaft 12.

14 is a small shaft passing through shaft 12 and having a disk 15 on the inner end and a nut 16 and grooved disk 11 on the outer end. Shaft 14 is insulated from shaft 12 by any insulating material 17 and is held firmly in position by nut 16. Disk 15 forms an insulated revolving contact-electrode. 75

18 is a movable shaft passing through igniter-body 1 and having a shoulder on the inside which presses against the igniter-body to form an air-tight seat, also having a projecting arm 19, provided with a point 20 and so arranged that when brought in contact with disk 15 it completes the electric circuit. Shaft 18 has mounted upon it a disk 21, provided with a clutch 22 on outer end. Disk 21 is free to rotate through a portion of a revolution until clutch 22 engages pin 23, which is through shaft 18. 80

24 shows a spring coiled around hub of disk 21, one end of which is fastened to disk 21 by pin 25 and the other end attached to pin 23. 85

26 is a rod passing through igniter-body, as shown, and having a rectangular head 27. 90

28 is a spring under compression coiled around boss 29 and pressing against igniter-body and nut 30.

30' is a special nut arranged to lengthen or shorten the rod 26.

31 is a pawl pivoted in head 27 on pin 32.

33 is a spring which presses pawl 31 against ratchet-wheel 13.

34 and 35 indicate catches on disk 21.

36 is a lever provided with catch 37 and mounted on stud 38.

39 is a spring which presses lever 36 toward disk 21.

40 and 41 are holes through which screws

may be put to fasten the igniter to the combustion-chamber.

42 is the crank-shaft of the engine.

43 is a gear securely fastened to crank-shaft 42.

44 is a gear double the diameter of gear 43 and is securely fastened to shaft 45.

46 is an eccentric securely fastened to gear 44.

47 is a portion of the crank-case.

48 is a bushing in crank-case 47 to support

rod 3.

The operation of the igniter is as follows:

The eccentric 46 receives its motion from the crank-shaft 42 through the gears 43 and 44 and travels at one-half the speed of the crank-shaft and in the direction of the arrow shown.

It will be seen that as the eccentric 46 rotates the rod 3, which is too close to shaft 45 to allow the highest point of the eccentric to pass under it without raising it, will be lifted

to some degree from its present position. The amount of this lift can be changed by lengthening or shortening the end of the rod nearer the eccentric 46. As the rod 3 rises it is

brought in contact with the nut 30', which is screwed fast to rod 26. As rod 26 rises it will

be seen that head 27, which is fast to rod 26, will be brought in contact with disk 21 at

point 35. As it continues to ascend the disk 21, which is loose on shaft 18, is rotated. As

it rotates the spring 24, which is fast to disk 21 and to pin 23 in shaft 18, rotates shaft 18

and causes electrode 20 to come in contact with disk-electrode 15, which halts the shaft

18 in its motion and closes the circuit. As the head 27 still ascends the pawl 31, which is

mounted therein, is brought in contact with one of the teeth in the ratchet-wheel 13, mounted on shaft 12, and the wheel 13 is rotated.

The rotation of the wheel 13 causes the disk-electrode to rotate, and thereby removes all dirt or insulating matter from between the electrodes. The spring 33 presses

the pawl 31 against ratchet 13. Disk 21 is rotated until point 34 on disk 21 has reached

point 37 on lever 36. It will be seen that as the head 27 is raised up it would be taken away from lever 36, and as lever 36 has a spring

39 pressing it upward as soon as point 34 on disk 21 passes over point 37 on lever 36 that

point 37 would fly up and engage point 34 on

disk 21. The clutch 22 on disk 21 would pass away from pin 23 in shaft 18 as soon as shaft 18 is halted in its rotating motion. When the points 34 and 37 lock or a trifle thereafter, the eccentric 46 has reached its highest point and begins to descend. The rod 26 is forced down by spring 28 as the eccentric passes down. When rod 26 descends, head 27 is brought down on lever 36, and as it continues to descend the point 37 releases point 34 and spring 24 drives disk 21 forward rapidly until clutch 22 engages pin 23, which imparts the momentum of the disk 21 to shaft 18, which in turn separates the electrodes 15 and 20, thereby causing a spark.

Having fully described our invention, which we claim as new, and desire to secure by Letters Patent, is—

1. In an electric igniting device for gas engines, the combination of a frame, a ratchet wheel mounted on a hollow shaft carrying an insulated disk-electrode, a solid shaft carrying a second electrode, both electrode-shafts passing inside the combustion-chamber, and the latter having an arm mounted thereon to contact said second electrode with the disk-electrode, mechanism to move the solid shaft to make and break contact of said electrodes and means to operate the ratchet-wheel after the electrodes are brought into contact, substantially as described.

2. In an electric igniting device for gas engines, the combination of a frame, an insulated stud mounted on said frame, a ratchet wheel mounted on a hollow shaft carrying an insulated disk-electrode, a solid shaft carrying a second electrode, both electrode-shafts passing inside the combustion-chamber, the latter having an arm mounted thereon to contact said second electrode with the disk-electrode, mechanism to move the solid shaft to make and break contact of said electrodes and means to operate the ratchet-wheel after the electrodes are brought into contact and means for connecting said insulated stud with said insulated electrode, substantially as described.

3. In a gas-engine igniting device, a frame carrying a revoluble insulated electrode, and an oscillatory solid-shaft electrode, both passing inside the combustion-chamber, a ratchet wheel mounted on the revoluble electrode, a disk 21 carrying a clutch 22 mounted on the oscillatory solid-shaft electrode, a pin 23 through said solid-shaft electrode, a spring 24 attached to disk 21 and to pin 23, catches 34 and 35 cut in disk 21, a lever 36 and all arranged and adapted to operate the revoluble and oscillatory electrodes, substantially as described.

4. In igniting devices for gas-engines, a combination of a frame carrying an oscillatory electrode and a revoluble electrode, an insulated stud mounted in said frame, means for connecting said insulated stud to said insulated electrode and means for operating the

the revoluble electrode after the oscillatory and revoluble electrodes connect, substantially as described.

5. In a gas-engine igniting device the combination of a frame 1 a revoluble electrode 14, an oscillatory electrode 18, a hollow shaft 12, a ratchet-wheel 13, a disk 21, a spring 24, a clutch 22, a pin 23, a pawl 31, a lever 36, a spring 39, a rod 26, a spring 28, a head 27, a

operate the igniter, substantially as described.

In testimony whereof we have hereunto affixed our signatures in the presence of two witnesses.

ROBERT COOPER. 761
JOHN COOPER.

Witnesses:

G. M. MILLER.

PETER WAUGAMAN.

UNITED STATES PATENT OFFICE.

FRANK DICKINSON, OF SPRINGPORT, MICHIGAN.

SPARKER.

SPECIFICATION forming part of Letters Patent No. 754,286, dated March 8, 1904.

Application filed June 15, 1903. Serial No. 161,535. (No model.)

to all whom it may concern:

Be it known that I, FRANK DICKINSON, a citizen of the United States, residing at Springport, in the county of Jackson and State of Michigan, have invented new and useful Improvements in Sparkers, of which the following is a specification.

This invention relates particularly to sparkers for igniting gas-engines, and has for its object to provide an improved construction whereby the time of sparking may be varied at this while the engine is in motion.

A further object is to produce a very quick separation of the electrodes and consequent spark.

In the accompanying drawings, Figure 1 is a side elevation of the igniter, in connection with a portion of the engine-cylinder. Fig. 2 is a top plan view of the igniter detached. Fig. 3 is an inside or bottom plan thereof, and Fig. 4 is an end elevation thereof looking in the direction of the arrow in Fig. 1.

The sparker herein described is mounted on and produces a spark in the valve casing or chamber 12, fixed to the side of the cylinder 3, and 1 indicates the base-plate having a recessed portion 1^a fitted in and through an opening in the top of the valve-casing, to which the plate is secured by screws 1^b. The rock-shaft 7, which carries the movable electrode 7, extends through this plate and finds its bearings herein and in a bracket 2, projecting from the upper side of the plate. The stationary electrode is indicated at 8, having a stem 8^a extending through and insulated from the plate.

Loosely mounted upon the shaft 3 is a yoke-hammer 4, the arms of which have eyes through which the shaft 3 extends. Between the arms of the lever the anvil 5 is sleeved upon the shaft and is made fast thereto by a set-screw, indicated at 5^a. The anvil has a projection or head 5^b, which is adapted to be struck by the engaging hammer 4, as more fully hereinafter described. At 6 is indicated a spring coiled around the shaft and having its ends attached, respectively, to the anvil 5 and one arm of the lever 4. The spring acts to make the hammer 4 strike the anvil and also by its upward or outward pressure against the anvil, which is fast

to the shaft, to maintain a gas-tight joint between the shaft and the plate 1^a.

The push-rod for operating the sparker is indicated at 14, and it may receive its motion from any suitable source. It is shown connected by an arm to the valve-rod 15. The rod 14 carries a head 16, having a catch 17, pivoted by a pin 17^a to the head. The engaging hammer 4 projects in the path of the catch in the reciprocation of the rod. Pressing against the rear end of the catch is a flat spring 18, which yields to permit the catch to snap back over the end of the hammer on the back motion. The free end of the push-rod 14 is carried in a guide-bearing 19, projecting from a timing-slide 11. This slide is movable sidewise with respect to the line of the push-rod and has a guide-rib 11^a, which works in a groove in the edge of the plate 1, where it is retained by a screw 11^b, which extends through a slot in the slide. The end of the slide is offset around the corner of the plate, as at 11^c, to give a bearing for the adjusting set-screw 10, the foot of which is tapped into the edge of the plate 1. By adjusting the screw the slide is moved back and forth, thereby changing the lap of the engaging hammer 4 with respect to the catch 17, and consequently the time of the release of the rock-shaft and sparking points.

In operation the thrust of the push-rod causes the catch 17 to engage the end of the hammer 4 and turns the same and with it the shaft 3 through the spring 6 and anvil 5 until the electrode 7 comes in contact with the electrode 8. Further movement of the push-rod and hammer is absorbed by the spring 6, and the hammer leaves the anvil-head 5^b. When the point of release is reached, the hammer 4 flies back and hits the head 5^b, throwing the anvil back and with it the rock-shaft. This gives a very quick separation of the electrodes and a bright fat spark, because the hammer 4 hits the anvil 5 while in motion. On the back stroke of the push-rod the catch 17 snaps over the beveled end of the hammer 4 and resumes its position for the next stroke. As above indicated, the time of firing may be varied by shifting the slide 11 to change the

lap and time of release of the catch and the hammer, and this can be done while the engine is in motion.

It is to be understood that the scope of the invention is not limited further than is indicated in the accompanying claim.

What I claim as new, and desire to secure by Letters Patent, is

In a sparking mechanism, the combination with a plate carrying the electrodes, of a push-

rod actuating the movable electrode, and an adjustable slide mounted on the plate and having a guide-bearing for the rod,

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses,

FRANK DICKINSON,

Witnesses:

ANDY M. JOHNSON,

ROSS W. BURGESS,

No. 820,535.

PATENTED MAY 15, 1906.

G. J. WEBER.
ELECTRIC IGNITER FOR EXPLOSIVE ENGINES.

APPLICATION FILED FEB. 16, 1903.

2 SHEETS-SHEET 1.

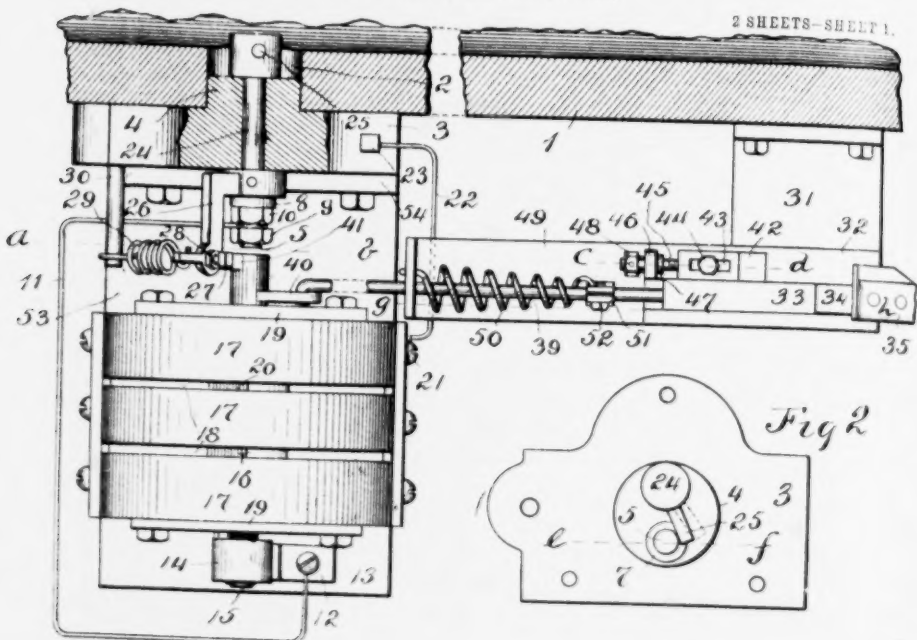


Fig 1

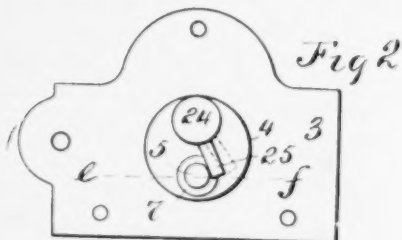


Fig 2

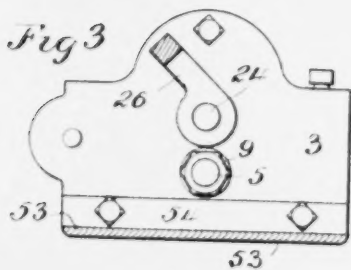


Fig 3

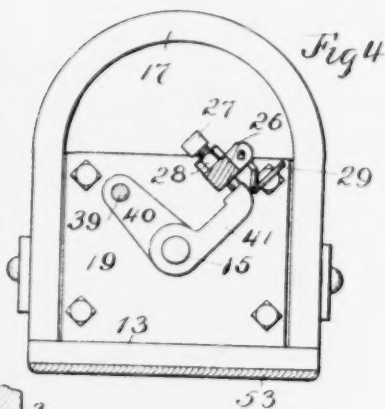


Fig 4

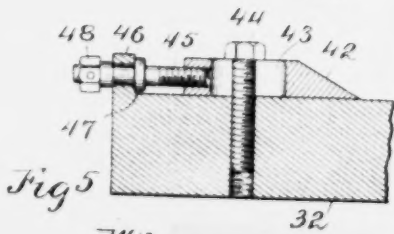


Fig 5

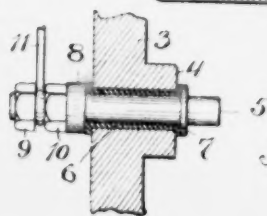


Fig 6

Witnesses
R. Hamilton.
H. G. Atkins.

Inventor
George J. Weber
By Warren & House
His Attorney

ELECTRIC IGNITER FOR EXPLOSIVE-ENGINES.

No. 820,535.

Specification of Letters Patent.

Patented May 15, 1906.

Application filed February 16, 1903. Serial No. 143,661.

all whom it may concern:

Be it known that I, GEORGE J. WEBER, a citizen of the United States of America, residing in Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Improvement in Electric Igniters for Explosive-Engines, of which the following is a specification, reference being had therein to the accompanying drawings, forming a part thereof.

My invention relates to improvements in electric igniters for explosive-engines.

The object of my invention is to provide an electric igniter mechanism with novel means for producing the spark for firing the charge.

My invention provides, further, certain adjusting means by which the time of producing the spark may be accurately predetermined.

My invention provides, further, timing means adjustable while the engine is running, thus permitting the ignition of the charge at the proper time for obtaining the greatest efficiency from the explosion of the charge.

Other novel features are hereinafter fully described and claimed.

In the accompanying drawings, which illustrate my invention, Figure 1 represents a plan view of the igniting mechanism, some of the parts being broken away and others shown in horizontal section. Fig. 2 is an in-line elevation view of the block in which are mounted the two electrodes. Fig. 3 is a vertical sectional view taken on the dotted line *a b* of Fig. 1 looking toward the engine-cylinder. Fig. 4 is a similar view taken on the same dotted line, but looking in the opposite direction. Fig. 5 is a vertical sectional view of the adjustable timing mechanism, taken on the dotted line *c d* of Fig. 1. Fig. 6 is a horizontal sectional view taken on the dotted line *e f* of Fig. 2, showing the stationary electrode and some of the parts connected therewith. Fig. 7 is a view, partially in vertical section and partially in elevation, of the igniting mechanism, the slide and armature-shaft being shown in the retracted position with the reciprocating actuating-arm about to engage and force forward the reciprocating slide. In view a portion of the magnetic field and parts connected therewith are shown in vertical section, the remainder of the field and the armature being shown in dotted lines. The slide and slide-support in this view are

shown partly in elevation and partly in vertical section, the vertical section being taken on the dotted line *g h* of Fig. 1. Fig. 8 is a view similar to that shown in Fig. 7, the armature and portions of the magnetic field being omitted and the slide and parts connected therewith being shown in the positions occupied by them when the timing mechanism has very nearly disengaged the actuating-arm from the slide, the said actuating-arm having moved the slide forward. Fig. 9 represents a view similar to that shown in Fig. 8, the magnetic field and parts connected therewith being omitted and the slide and parts connected therewith being shown in the positions occupied by them after the timing mechanism has released the slide from engagement with the reciprocating actuating-arm. In this figure the furthest retracted positions of the slide and parts connected therewith are shown in dotted lines. The positions occupied by the movable electrode and the crank-arm connected thereto when the electrodes have been separated are also shown in dotted lines.

Similar characters of reference indicate similar parts.

1 indicates the engine-cylinder having a side opening 2. An igniter-block 3 is fitted to the outer side of the cylinder and is provided with an inner extension 4, fitted in the opening 2. In a horizontal opening through the block 3 extends a stationary electrode 5, insulated by a sleeve 6 of insulating material from the block 3. The ends of the sleeve 6 are provided with peripheral flanges. Against the flange at the inner end rests the rear side of a flange 7, provided on the inner end of the electrode 5, which is located in the opening 2 of the cylinder. Outside the block 3 on the electrode 5 is mounted a washer 8, which rests against the outer flange upon the sleeve 6. The outer end of the electrode 5 is screw-threaded and has mounted thereon two nuts 9 and 10, the inner one, 10, resting against the washer 8. Between the nuts 9 and 10 is clamped a wire 11, which is also secured to a horizontal non-magnetic plate or board 13. The other end of the commutator-brush bears upon a sleeve 14, rotatable with but insulated from the armature-shaft 15, on which is mounted the armature 16. The magneto machine may be of the ordinary Siemens magneto-electric type having horse-shoe-shaped permanent magnets 17, to which

are attached soft-iron pole-pieces 18. At the ends of the pole-pieces 18 are secured the two vertical shaft-bearing plates 19, in which the horizontal shaft 15 is rotatably mounted.

5 The armature may be wound in the manner common to this type. One end of the winding (indicated by 20) is connected to the insulated sleeve 14 and the other end connected to the armature-shaft, the circuit being completed

10 to the block 3 through the bearings 19, one of the pole-pieces 18, screw 21, mounted in a screw-threaded hole in the pole-piece, thence by a wire 22, one end of which is secured to said screw 21, the other end being secured to the screw 23, mounted in a screw-threaded hole in the upper side of the block 3. Parallel

5 with and above the electrode 5 is mounted in a horizontal hole extending through the block 3 the rock-shaft 24, in the inner end of which is secured radially an electrode 25,

20 adapted to bear upon the inner end of the electrode 5. Upon the outer end of the rock-shaft 24 and rotatable therewith is a crank-arm 26, upon the outer end of which in a screw-threaded opening provided therefor

25 is mounted an adjusting-screw 27, which extends transversely through the crank-arm and has mounted thereon a lock-nut 28, adapted to bear against the said crank-arm. To the crank-arm 26 is secured one end of a coil-spring 29, the other end of which is secured to a pin 30, extending horizontally rearwardly from the block 3.

The rock-shaft 15, together with the armature 16, is oscillated to and fro by the following mechanism. A horizontal bracket 31 to the right of the igniter-block 3, as viewed in Fig. 1, is secured at its inner end to the outside of the cylinder 1 and has mounted upon

40 its upper side a slide guide or support 32, the upper side of which is provided with a groove disposed at right angles to the armature-shaft 15. In said groove is reciprocatively mounted a slide 33, provided on its upper

45 side with a projection 34, adapted to be engaged by the free end of a reciprocating arm 35, the opposite end of which is connected with mechanism controlled by the running of the engine and designed to reciprocate the said arm 35.

In Figs. 7, 8, and 9 I have shown a mechanism adapted for this purpose, in which 36 indicates the rotatable crank-shaft of the engine. Upon said crank-shaft is mounted

55 and rotatable therewith a crank-arm 37, having a crank-pin 38, pivotally fitted in a transverse hole provided in the arm 35. As the crank-shaft 36 is rotated the arm 35 will be reciprocated by means of the crank-arm 37

60 and pin 38. To the left end of the slide 33, as viewed in Figs. 1, 7, 8, and 9, is secured in a screw-threaded opening provided in said slide the screw-threaded end of a rod 39, the other end of which is pivotally connected to a crank-arm 40, rigidly secured upon the in-

ner end of the armature-shaft 15. A hammer-arm 41 is also secured upon the said armature-shaft. The outer end of the said hammer-arm 41 is so disposed that when the armature-shaft is retracted in the proper direction it will come in contact with the adjusting-screw 27 in the crank-arm 26 and move the said crank-arm 26 in a direction such that the electrodes 5 and 25 will be separated from each other, as shown in dotted lines in Figs. 2 and 9. Upon the upper side of the slide-support 32 is secured the timing device, by which the arm 35 is disengaged from the projection 34 of the slide 33. Various means may be employed for causing such disengagement.

In the form illustrated in the drawings I have provided a plate 42, disposed parallel with and at one side of the slide 33. The right end of the said plate 42, as viewed in Figs. 1, 7, 8, and 9, is inclined upwardly to the left, said inclined portion being at its upper end in a higher plane than the upper surface of the projection 34. The free end of the reciprocating arm 35 is so disposed as to come in contact with the inclined portion of the plate 42 and by the said plate made to rise and clear the projection 34 at the proper time when disengagement of the arm 35 from the projection 34 is desired. In order that such disengagement may be made to occur at any desired time, I have designed means by which the plate 42 may be adjusted lengthwise. For this purpose the plate 42 is provided with a vertical longitudinal slot 43, in which is mounted a vertical guide-screw 44, the lower end of which is fitted to a vertical screw-threaded hole provided in the slide-support 32. The left end of the plate 42, as viewed in Figs. 1 and 5, is provided with a longitudinal screw-threaded hole, in which is fitted the right screw-threaded end of an adjusting-screw 45, which is rotatively mounted in a transverse hole provided in a vertical projection 46 on the upper side of the slide-support 32. The said adjusting-screw 45 is provided at the right of the projection 46 with a peripheral flange 47 for preventing lengthwise movement of the said screw in one direction. Movement in the opposite direction is prevented by means of a collar 48, rigidly secured upon the said adjusting-screw and bearing upon the left side of the projection 46. By turning the said adjusting-screw 45 in the proper direction the plate 42 may be adjusted longitudinally to the proper position, after which the guide-screw 44 is turned so as to cause the head thereof to bear tightly upon the upper side of the plate 42, thus insuring the permanent disposition of the plate 42 in the place desired.

Secured to the left end of the slide-support 32, as viewed in Figs. 1, 7, 8, and 9, is a slightly-inclined plate 49, the left end of which is bent upwardly at right angles at

provided in such bent portion with a transverse hole through which the rod 39 may be reciprocated. Encircling the rod 39 is a coil-spring 50, one end of which is secured to the bent portion of the plate 49, the other end being secured to a longitudinally-adjustable split sleeve 51, mounted on the rod 39 and adapted to be rigidly secured thereto after it has been properly adjusted by means of a transverse screw 52, rotatively mounted in oppositely-disposed holes in the split portion of the said sleeve 51. In one of said holes the said screw 52 has no screw-thread engagement; but the other of said holes is screw-threaded and fitted to the said screw. By turning the said screw 52 in the proper direction the sleeve 51 may be loosened upon the rod 39, adjusted longitudinally thereon to the proper position, and then rigidly secured in position by tightening the screw 52.

The tension of the spring 50 is such that after the spring has been compressed, as shown in Fig. 8, and then permitted to become extended, as shown in Fig. 9, through disengagement of the arm 35 from the projection 34 the said spring 50 will force the slide 33 and rod 39 to the right, thus oscillating the armature-shaft 15 in a direction such that the hammer-arm 41 will come in contact forcibly with the end of the adjusting-screw 27. The inertia of the slide 33, together with the force of the spring 50, will force the parts into the position shown in dotted lines in Fig. 9—that is, the hammer-arm 41 will force the crank-arm 26 to move in a direction such that the electrodes 5 and 25 will become separated. After the inertia of the slide 33 has been overcome the spring 29 and the spring 50 will cause a retraction of the parts into the position shown in solid lines in Fig. 9, in which position the electrodes 5 and 25 will again come in contact, thus completing the electric circuit.

In operating my invention, the parts having been assembled as described and the parts adjusted so that the electrodes 5 and 25 will be separated at approximately the proper time, the engine is started. As the engine crank-shaft 36 is rotated the slide 33 will be moved to the left, as viewed in Figs. 1, 7, 8, and 9, by the mechanism already described to the position shown in Fig. 8. In this position the armature-shaft will be oscillated in a direction such that the hammer-arm 41 will be as shown in Fig. 8. In the meantime the free end of the arm 35 will have been raised by the inclined portion of the plate 42, so as to nearly clear the projection 34. Continued movement forward of the arm 35 will cause it to be cleared from the projection 34, and the slide 33 will then be retracted by the spring 50 to the positions shown in Fig. 9, thus causing the hammer-arm 41 to strike the screw 27 and force the electrodes 5 and 25 apart, as already described. While the ar-

mature-shaft 15, slide 33, and parts connected therewith are being retracted from the positions shown in Fig. 8 to those shown in Fig. 9, the armature 16, carried by the shaft 15, will be oscillated so as to pass from one pole-piece 18 toward the opposite pole-piece. This movement of the armature will cause a current to be generated in the armature-winding 20, the said current passing in one direction or the other in the circuit in which the armature-winding is located, the direction depending upon the polarity of the pole-pieces and the manner of winding the wire on the armature. If the current passes first from the winding 20 to the commutator 14, it will pass from thence to the wire 11 by means of the brush 12, thence through the electrodes 5 and 25 to the igniter-block 3, thence by the screw 23, wire 22, screw 21, pole-piece 18 to bearings 19, thence by armature-shaft 15 to the end of the armature-winding which is secured to the said shaft. The crank-arms 26 and 41 are so adjusted upon their respective shafts that the screw 27 will be struck by the crank hammer-arm 41 at a time when the current generated in the circuit will be near its maximum strength. The hammer-arm 41 striking the anvil mechanism, consisting of the screw 27 and the crank-arm 26, will cause the electrode rock-shaft 24 to oscillate, so as to separate the electrodes 5 and 25 at the time when the strength of the electric current in the circuit is at its maximum strength. The timing mechanism, of which the plate 42 forms a part, will be so adjusted that when the spark occurs, due to the separation of the electrodes 5 and 25, the charge in the cylinder 1 will be very near its maximum compression. The time of separating the electrodes may be further regulated by adjusting the sleeve 51 longitudinally on the rod 39. The more compression given the spring 50 by moving the sleeve 51 in the proper direction the quicker the electrodes will be separated, as the spring 29 will be sooner overcome and permit a movement of the crank-arm 26. By adjusting the screw 27 the time for separating the electrodes may also be varied. After the engine has begun to run at its regular speed the adjustment of the time for producing the spark between the electrodes 5 and 25 may be obtained with great exactness, so that the charge may be fired at the exact time required for the greatest efficiency. To make this adjustment while the engine is running, the clamping-screw 44 is slightly loosened and the screw 45 turned in a direction such that the plate 42 will be moved to the right or left, as it may be desired, in order to disengage the arm 35 from the projection 34 sooner or later. It will be understood that if the engine is to be run at a rapid speed it is necessary to fire the charge sooner than when the engine is running at a slower speed. So when it is desired to increase the speed of

the engine to secure the greatest efficiency from the expansive force of the charge in the cylinder it becomes necessary to fire the charge earlier. This may be done, as described, while the engine is running by turning the screw 45 in the proper direction to advance the plate 42 toward the arm 35, after which the screw 44 is tightened to preserve the adjustment obtained.

Any one versed in the art will understand the great advantage of being able to adjust the time of firing the charge while the engine is running at its regular working speed, as at this time the operator can exactly determine the proper time for producing the firing-spark.

In order that the crank-arm 26 and the hammer-arm 41 may hold their relative positions with respect to each other intact, I prefer to mount the plate or board 13 upon a horizontal bracket 53, the inner end of which is provided with a vertical flange 54, secured rigidly to the igniter-block 3. The igniter-block 3, which is such as are commonly used in engines of this type, may be sent, together with the magneto-electric machine and some of the parts connected therewith, and fitted to an engine in lieu of a similar igniter-block provided with another sparking mechanism. The bracket 31, together with the parts mounted thereon, may also be sent from the factory ready to mount on an engine already set up. In such cases it is but necessary to connect the rod 39 to the crank-arm 40 after the brackets 53 and 31 are secured in place.

The rod 39 being quite long and slender, lack of sufficient space on the sheet preventing its full length being shown, the end connected with the crank-arm 40 can yield the amount required to follow the arc described by the said crank-arm in oscillating to and fro.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating slide, means controlled by the running of the engine for moving the slide in one direction, means for moving the slide in the opposite direction, means for oscillating the armature by means of the slide, means for separating the electrodes when the slide is moved in said opposite direction, and means for timing the movement of the said slide in said opposite direction.

In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes, of means for

normally holding the said electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating slide, means controlled by the running of the engine for moving the slide in one direction, a spring for retracting the slide, means for oscillating the armature by means of the slide, adjustable timing means for determining the time of retracting the slide, and means for separating the electrodes when the slide is retracted.

3. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes, one of which is movable, of means for normally holding the said electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating slide, means controlled by the running of the engine for moving the slide in one direction, a spring for retracting the slide, means for oscillating the armature by means of the slide, timing means adjustable independently of the running of the engine for determining the time of retracting the slide, and adjustable means for separating the electrodes when the slide is retracted.

4. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes one of which is movable relative to the other, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating slide, means by which the armature is oscillated by means of the slide, means controlled by the running of the engine for moving the slide in one direction, means for retracting the slide in the opposite direction and two arms, one oscillatory with the armature and the other mounted on the movable electrode the said two arms being so disposed that the arm carried by the armature will strike the electrode-arm and cause a separation of the electrodes when the slide is retracted.

5. In igniters for explosive-engines, the combination with an oscillatory armature-shaft, of a hammer-arm oscillatory therewith, a reciprocating slide, means controlled by the running of the engine for moving the slide in one direction, spring-actuated mechanism for retracting the slide, timing means controlling the retraction of the slide, means for oscillating the armature-shaft by means of the slide, two electrodes, one fixed and the other movable, the movable electrode being provided with an arm, an adjusting-screw rotatably mounted in said arm and adapted to be struck by the hammer-arm when the armature-shaft is retracted, and means for normally holding the two electrodes in contact with each other.

6. In igniters for explosive-engines, the

combination with an electric circuit having included therein two electrodes, of means for holding the electrodes normally in contact with each other, an oscillatory armature, a reciprocating slide, means for oscillating the armature by means of the slide, a reciprocating actuating device reciprocated by the running of the engine and provided with means for engaging and moving the slide in one direction, a tripping device for releasing the slide from the actuating device, means for retracting the slide, and means for separating the electrodes when the slide is retracted.

7. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes, of means for holding the electrodes normally in contact with each other, an oscillatory armature included in the said circuit, a reciprocating slide, means for oscillating the armature by means of the slide, a reciprocating actuating device reciprocated by the running of the engine and provided with means for engaging and moving the slide in one direction, an adjustable tripping device for releasing the slide from the actuating device, means for retracting the slide when the same is released from

the actuating device, and means for separating the electrodes when the slide is retracted.

8. In igniters for explosive-engines, the combination with an electric circuit of two electrodes one of which is movable toward and from the other, means for normally holding the electrodes in contact with each other, an oscillatory armature provided with a winding included in the said circuit, an oscillatory shaft on which the armature is mounted, a crank carried by said shaft, a reciprocating slide, a rod connecting said slide and said crank, a magnetic field in which the armature is located, means controlled by the running of the engine for moving the slide in one direction, means for retracting the slide in the opposite direction, adjustable timing means for determining the time of retraction of the slide, and means for separating the electrodes when the slide is retracted.

In testimony whereof I have signed my name to this specification in presence of the two subscribing witnesses.

GEORGE J. WEBER.

Witnesses:

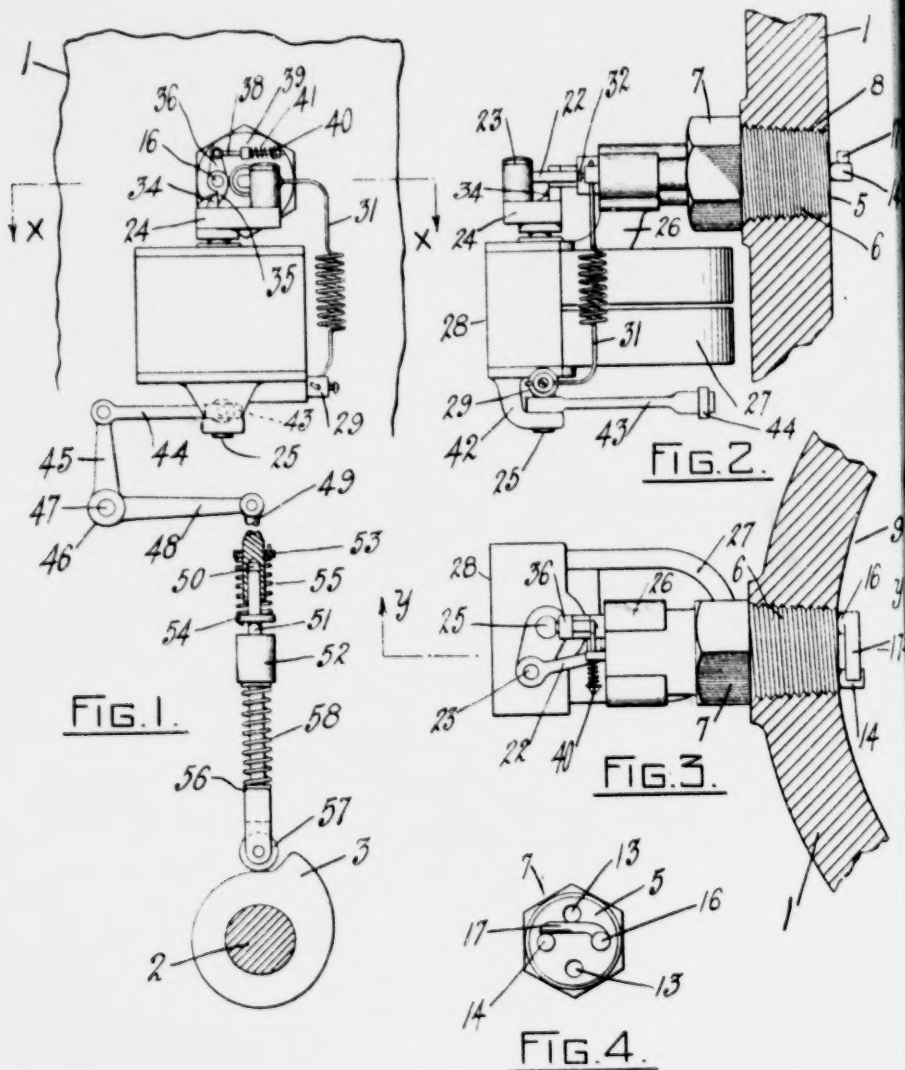
WARREN D. HOUSE,
JESSIE R. COMSTOCK.

L. H. WATTLES.
SPARKING IGNITER.
APPLICATION FILED MAY 29, 1908.

909,264.

Patented Jan. 12, 1909.

3 SHEETS—SHEET 1.



WITNESSES

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SPARKING IGNITER.

APPLICATION FILED MAY 29, 1908.

909,264.

Patented Jan. 12, 1909.

3 SHEETS—SHEET 2.

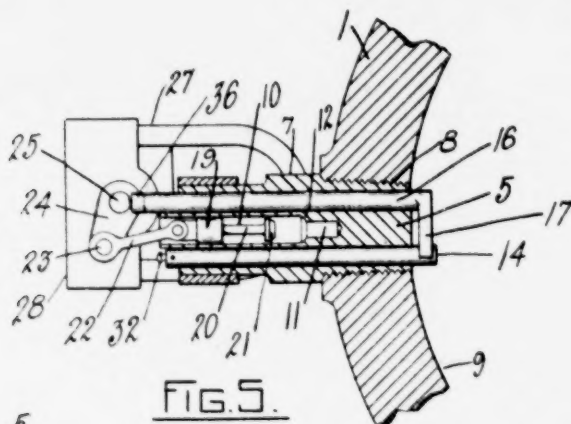


FIG. 5.

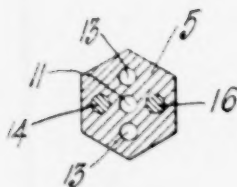


FIG. 7.

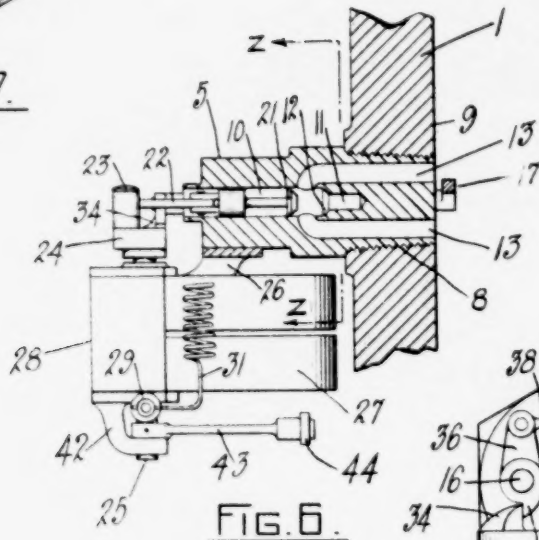


FIG. 6.

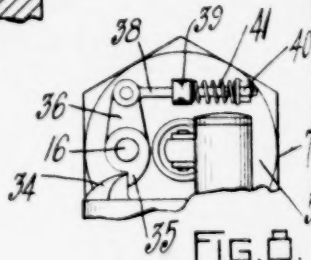


FIG. 8.

WITNESSES.

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SPARKING IGNITER.

APPLICATION FILED MAY 29, 1908.

909,264.

Patented Jan. 12, 1909.

3 SHEETS—SHEET 3.

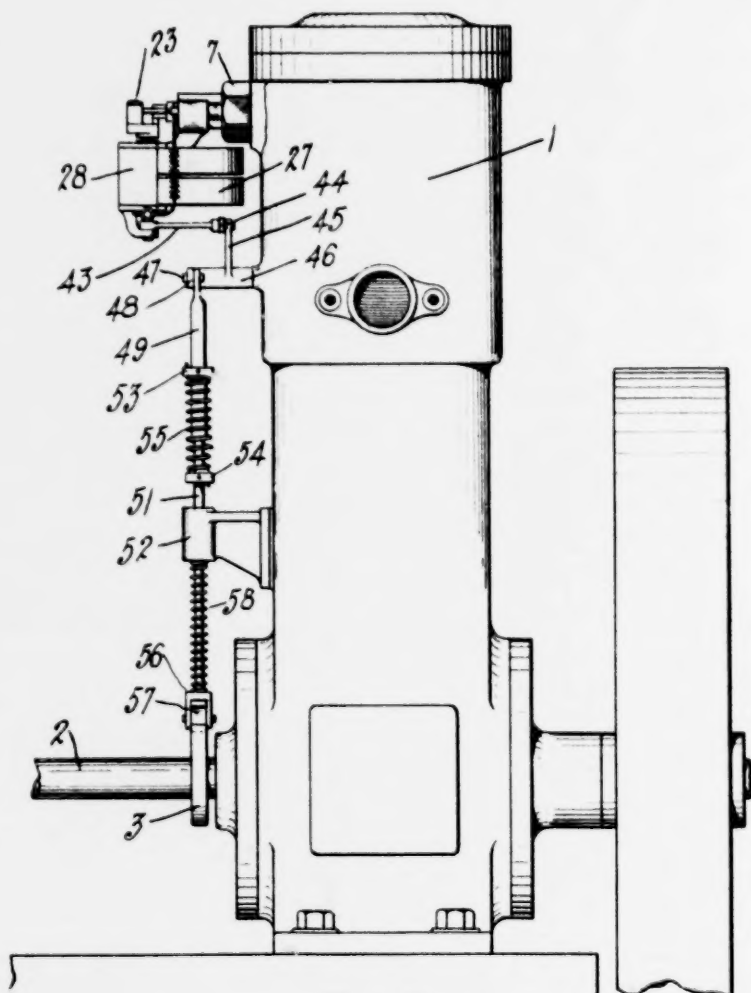


FIG. 9.

WITNESSES.

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Luther H. Wattles
By Horatio E. Dillmore
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UNITED STATES PATENT OFFICE. 783

LUTHER H. WATTLES, OF PROVIDENCE, RHODE ISLAND, ASSIGNOR OF ONE-HALF TO MATIE C. MESSLER, OF PAWTUCKET, RHODE ISLAND.

SPARKING IGNITER.

No. 909,264.

Specification of Letters Patent.

Patented Jan. 12, 1909.

Application filed May 29, 1908. Serial No. 435,704.

To all whom it may concern:

Be it known that I, LUTHER H. WATTLES, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Sparking Igniters, of which the following is a specification.

My invention relates to sparking ignition devices for internal combustion engines and has in addition to the ends commonly sought in this class of structures, the following objects: the production of a forcible, certain, and long break or spark despite any accumulations upon the electrode surfaces; the facilitation of sparking by the destruction of the dead fuel stratum around the electrodes; the utilization of the compressed charge to actuate the magneto, and to assure the generation of a current of high electromotive force for the igniter circuit; the provision of a construction which permits the starting of the engine by a partial revolution of the crank shaft and without complete compression of the charge.

To the above enumerated and other ends, my invention consists of means for operating the magneto with the charge compressed in the engine cylinder, and of the driving mechanism employed to thus operate same; of means for insuring a circulation around the electrodes in the explosion chamber and within the area of the dead fuel stratum; and of means positive and independent of the magneto driving means for starting the magneto armature.

These features of invention as well as other features which will be set forth in the claims, will be understood from a detailed description of the device in which they are embodied, and which illustrates all the various features of the invention in the forms in which I prefer to use them.

This device is shown in the accompanying drawings which constitute a part of this specification, and in which—

Figures 1, 2 and 3 are front, side, and top plan elevations respectively of my novel apparatus mounted in the side of engine cylinder. Fig. 4, a bottom plan view of the plug. Fig. 5, a section on line *z z* of Fig. 1. Fig. 6, a section on *y y* of Fig. 3. Fig. 7, a transverse section of the plug on line *z z* of Fig. 6.

Fig. 8, an enlarged end view of the plug, and Fig. 9, a side elevation of an engine provided with my device. 55

Like characters of reference indicate like parts throughout the views.

My device is adapted for use upon both two cycle and four cycle engines and is herein illustrated as applied to a two cycle engine of standard construction, the details of which are therefore omitted. 60

1 represents the side cylinder casting, 2 the crank shaft, and 3 the cam, of a two cycle engine, in connection with which the elements of the invention are described. 65

The embodiment of my invention in this instance comprises a plug, 5, provided with an exteriorly threaded end portion, 6, and hexagonal intermediate portion, 7. This plug is fixed in a threaded opening, 8, in the casting, 1, near the top of the cylinder, with its end face exposed in the compression area of combustion chamber, 9. The outer end of the plug is centrally bored to form a longitudinal chamber, 10, extending partially through the plug. The inner end of the chamber is of lessened diameter forming an auxiliary chamber or pocket, 11, and a beveled shoulder or valve seat, 12. Two passages, 13, 13, in the plug extend from opposite sides of the chamber, 10, to the combustion chamber. 75

Fixed within and insulated from the igniter plug, 5, is the electrode, 14, and axially movable in the plug is the grounded electrode, 16, provided with the contact arm, 17, within the combustion chamber. 85

Mounted in the chamber, 10, is a piston, 19, provided upon its face with the stem, 20, of a valve, 21. A connecting rod, 22, connects the piston with a crank pin, 23, upon a crank arm or disk, 24, fixed to the armature, 25, of an electric generator supported by a bracket or arm, 26, mounted upon the plug, 5. 90

The generator or magneto may be of any usual or preferred construction. The form thereof herein shown comprises horseshoe magnets, 27, base 28, and binding post 29, whence through the wire 31, leading to the binding post, 32, the current generated by the dynamo passes to the stationary electrode, 14. 95

Upon the margin of the upper face of the

crank arm or disk 24 is a lug or projection, 34, contacting with the free end, 35, of a lever, 36, stationary intermediate its length to the outer end of the electrode, 16. Pivoted to the end of the lever, 36, is a rod, 38, slidably mounted in a post, 39, upon the end of the plug. Upon the end of the rod, 38, is an adjusting nut, 40, against which abuts a spring, 41, whose opposite end presses against the post, 39.

Fixed to the base, 28, of the magneto is a step or bearing arm, 42, for the lower end of the armature, 25. To the armature is fixed an arm, 43, whose free end is connected by a link, 44, to the upper arm, 45, of a bell crank lever, 46, mounted upon a stud, 47, in the engine casing, and to whose lower arm, 48, is pivoted the upper section, 49, of a telescoping cam rod. This section has a longitudinal bore, 50, to receive as a sliding fit the upper end of a second section, 51, mounted in a bearing, 52, upon the engine casing. Fixed upon the sections, 49 and 51, near their telescoping ends, are collars, 53 and 54, respectively, against which press a spiral spring, 55. The rod section, 51, has below the bearing, 52, a shoulder, 56, and carries upon its end the usual cam roll, 57, which rests against cam 3. The spring, 58, upon the cam rod section, 51, presses against the bearing, 52, and shoulders, 56, to keep the roll, 57, in contact with the cam. It will be understood that the described mechanism for communicating motion from the cam, 3, to the armature, 25, is not exclusive.

The operation of the apparatus is as follows: When the engine crank has passed its center the cam, 3, starts the armature, 25, through the cam rod connections, and through the crank disk, 24, and connecting rod, 22, elevates the piston, 19, and the valve, 21, slightly from the seat, 12, of the latter. At this instant, the compression of the engine charge in the combustion chamber has reached its highest point, and traversing the passages, 13, strikes the inner faces of valve, 21, and piston, 19, with great force, imparting through crank disk, 24, a movement at a high rate of speed to the armature, 25. The described impulse is purposed to rotate the crank disk approximately thirty degrees. The limit of this movement may be regulated by the spring, 41, which is adjustable by nut, 40. The advance of the crank disk through projections, 34 and 35, imparts to the movable electrode, 16, a rotary movement whereby the contact arm, 17, is swung away from the electrode, 14, with great force and in a long arc thereby producing a long spark. After the explosion, the contact arm, 17, is swung back into close contact with the electrode, 14, by the action of spring, 41, upon the rod, 38, and

lever 36. The armature, piston, and valve are forced back into original position by the cam, 3, rod 51, 49, lever 46, link 44, and arm 43. The reservoir or pocket, 11, facilitates the action of the valve.

It will be observed that the diameter of the valve, 21, is less than that of the piston, 19, and that the inlet passages, 13, when the valve is seated, open intermediate the piston and valve. Therefore, the balancing is so perfect that after the latter is slightly raised from its seat, but little pressure through the inlets is required to propel the piston, 19, and little mechanical force is required to initially unseat the valve. This initial unseating may be effected at any time by manually depressing the cam rod section, 49, against the tension of spring, 55, which normally holds the valve, 21, in its seat. The possibility of thus manually raising the valve from its seat by the exertion of very little force makes it possible to produce the spark and start the engine without completely rotating the crank shaft or completely compressing the charge. That is to say, the fly wheel is rotated rearwardly a fraction of a rotation which produces a partial compression, and the valve is next manually unseated as described.

The passage of the charge from the combustion chamber through the passage, 13, insures a circulation around the sparking points and prevents the development of a dead fuel stratum around the electrodes. The certainty and strength of the spark is increased because of the great speed imparted to the magneto armature by the compressed charge.

For the purposes of this invention, it is immaterial whether the engine with which my igniter is used is of the explosive or internal combustion type; whether the fuel is injected into the charge before the engine crank has passed its upper center or after; or whether compressed charge consists of fuel or air, or fuel and air mixed.

Having described my invention, what I claim is:

1. In an electric sparking ignition mechanism, the combination with an engine cylinder, and electrodes in the cylinder, or means electrically connected with the electrodes and actuated by the unignited compressed charge in the cylinder for generating a current in the electrodes.

2. In an electric sparking ignition mechanism, the combination with an engine cylinder, electrodes, and an electric generator therefor, of means actuated directly by the compression of the engine charge for operating the generator.

3. In an electric sparking ignition mechanism, the combination with an engine cylinder, an igniter circuit, and an electric generator having an armature in the circuit of means operated directly by the compressed

sion of the charge in the cylinder for imparting the generating throw to the armature of the generator.

4. In an electric sparking ignition mechanism, the combination with an engine cylinder, an ignition circuit, and an electric generator having an armature shaft in the circuit, of means actuated directly by the compression of the charge in the cylinder for imparting the generating throw to the armature shaft of the generator.

5. In an electric sparking ignition mechanism, the combination with an engine cylinder, an ignition circuit, and an electric generator having an armature shaft in the circuit, of means actuated directly by the compression of the charge in the cylinder for imparting the generating throw to the armature shaft of the generator, and spring means for returning the armature shaft to original position.

6. In an electric sparking ignition mechanism, the combination with an engine cylinder, electrodes in the cylinder, and an electric generator having an armature shaft, of a piston operatively connected with the generator armature shaft, and adapted to be actuated directly by the compression of the charge in the cylinder.

7. In an electric sparking ignition mechanism, the combination with an engine cylinder, an ignition circuit, and an electric generator having an armature shaft, of a piston operatively connected with the generator armature shaft and actuated directly by the compression of the charge in the engine cylinder.

8. In an electric sparking ignition mechanism, the combination with an engine cylinder, and movable and stationary electrodes in the cylinder, of an electric generator in the ignition circuit actuated directly by the compression of the charge in the cylinder, and means actuated by the generator for operating the movable electrode.

9. In an electric sparking ignition mechanism, the combination with an engine cylinder, an engine cam rod, an electric generator having an armature shaft, and an ignition circuit, of means operated directly by the charge in the cylinder for imparting a generating throw to the armature shaft, and means actuated by the cam rod for initially moving the armature shaft.

10. In an electric sparking ignition mechanism, the combination with an engine cylinder and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber, and with passages extending from the chamber into the cylinder, a piston in the chamber, and driving connections between the piston and armature shaft.

11. In an electric sparking ignition mechanism, the combination with an engine cyl-

inder, and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber and valve seat, and with passages extending from the chamber into the cylinder, a piston in the chamber, a valve fixed to the piston and adapted to register in the valve seat, and driving connections between the piston and armature shaft.

12. In an electric sparking ignition mechanism, the combination with an engine cylinder, and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber and a valve seat, and with passages extending from the chamber into the cylinder, a piston in the chamber, a valve of less diameter than the piston fixed to the piston, and adapted to register in the valve seat, and driving connections between the piston and armature shaft.

13. In an electric sparking ignition mechanism, the combination with an engine cylinder, and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber, a pocket at the end of the chamber, a valve seat at the open end of the pocket, and with passages extending from the chamber into the cylinder, a piston in the chamber, a valve upon the piston adapted to register in the valve seat, and driving connections between the piston and armature shaft.

14. In an electric sparking ignition mechanism, the combination with an engine cylinder, and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, a crank upon the armature shaft, and a rod connecting the piston with the crank.

15. In an electric sparking ignition mechanism, the combination with an engine cylinder, a cam rod and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, a crank upon the armature shaft, a rod connecting the piston with the crank, an arm upon the armature shaft, and pivoted connections between the arm and cam rod.

16. In an electric sparking ignition mechanism, the combination with an engine cylinder, a cam rod and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, a crank upon the armature shaft, a rod connecting the piston and crank, an arm upon the armature shaft, operative connections between the arm and cam rod, and yielding means upon the cam rod for normally tensioning the armature shaft.

17. In an electric sparking ignition mechanism, the combination with an engine cyl-

inder and electrodes in the cylinder, of means electrically connected with the electrodes and actuated directly by the compressed charge in the cylinder for generating a current in the electrodes.

18. In an electric sparking ignition mechanism, the combination with an engine cylinder, electrodes, and an electric generator

therefor, of means actuated by the unignited engine charge for operating the generator. 10

In testimony whereof I have affixed my signature in presence of two witnesses.

LUTHER H. WATTLES.

Witnesses:

HORATIO E. BELLOWS,
WALTER LOUIS FROST.

It is hereby certified that in Letters Patent No. 909,264, granted January 12, 1909, upon the application of Luther H. Wattles, of Providence, Rhode Island, for an improvement in "Sparking Igniters," an error appears in the printed specification requiring correction, as follows: In line 113, page 2, the word "or" should read *of*; and that the said Letters Patent should be read with this correction therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 8th day of June, A. D., 1909.

[SEAL.]

C. C. BILLINGS,
Acting Commissioner of Patents.

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Sr

R. HENNIG.

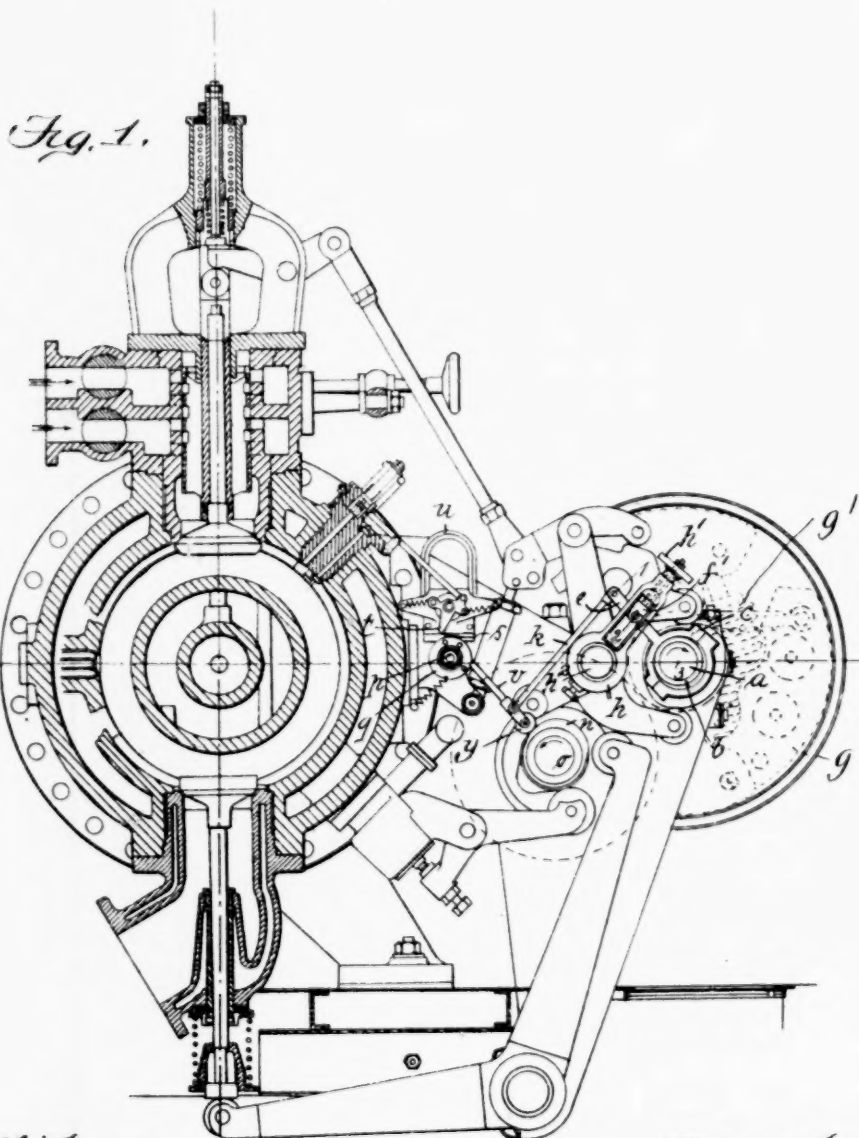
IGNITION GEAR FOR INTERNAL COMBUSTION ENGINES.

APPLICATION FILED MAR. 3, 1904.

916,312.

Patented Mar. 23, 1909.

5 SHEETS—SHEET 1.



Witnesses

James A. Morris, Jr.
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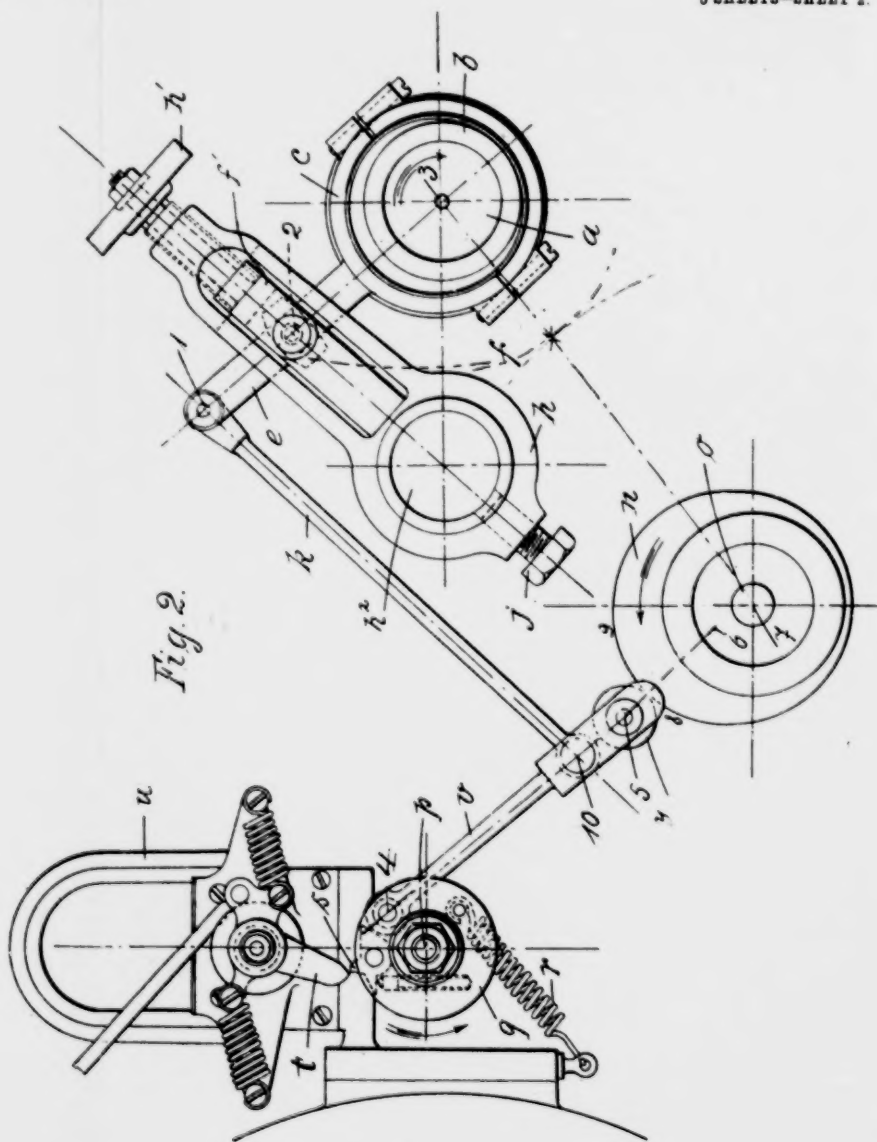
IGNITION GEAR FOR INTERNAL COMBUSTION ENGINES.

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916,312.

Patented Mar. 23, 1909.

5 SHEETS—SHEET 2.



Witnesses:

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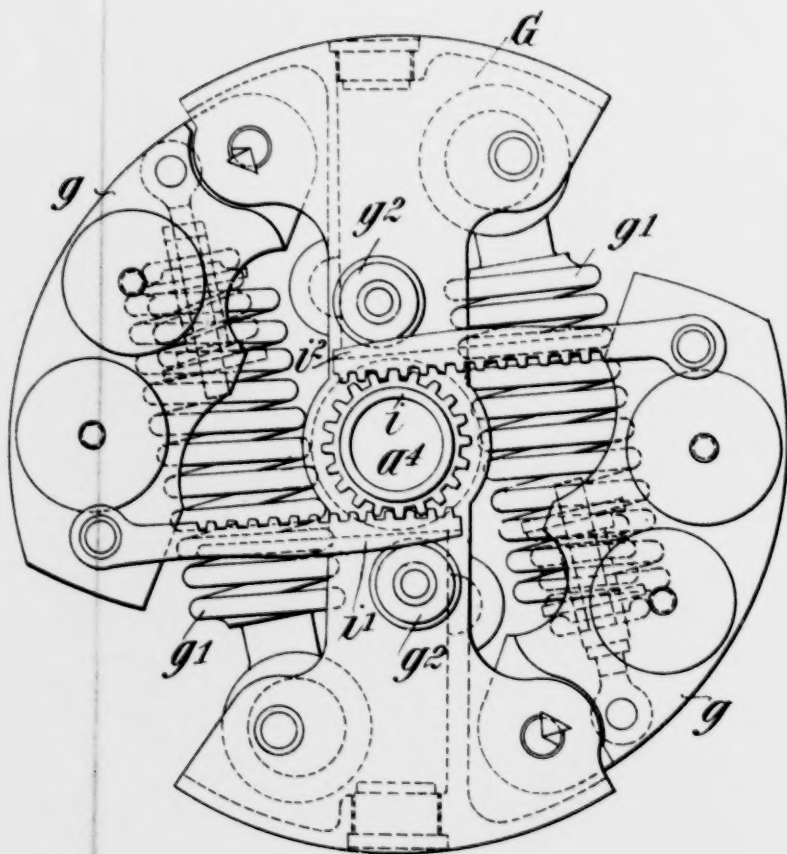
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R. HENNIG.
IGNITION GEAR FOR INTERNAL COMBUSTION ENGINES.
APPLICATION FILED MAR. 3, 1904.

916,312.

Patented Mar. 23, 1909.

6 SHEETS—SHEET 3.

Fig. 3.

Witnesses:

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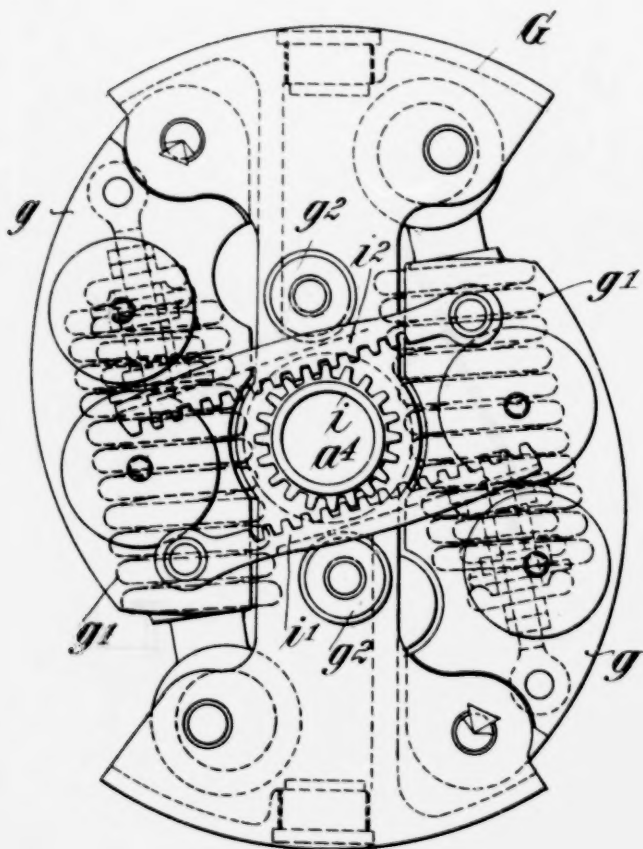
IGNITION GEAR FOR INTERNAL COMBUSTION ENGINES.

APPLICATION FILED MAR. 3, 1904.

916,312.

Patented Mar. 23, 1909.

5 SHEETS—SHEET 4.

Fig. 4.

witnesses:

James L. Norris, Jr.
 & Kesler

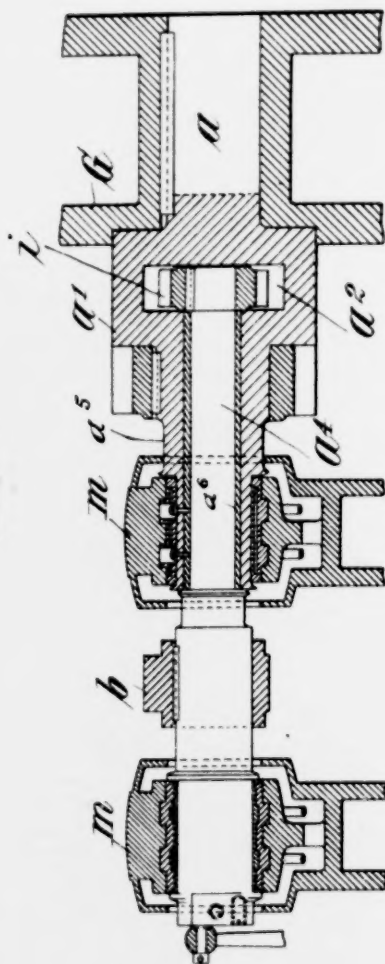
Inventor

Rudolf Hennig

By

James L. Norris.

Fig. 5.



Witnesses:

James L. Morris, Jr.
Charles Kessler

Inventor
Rudolf Hennig
By James L. Morris

IGNITION-GEAR FOR INTERNAL-COMBUSTION ENGINES.

No. 916,312.

Specification of Letters Patent.

Patented March 23, 1909.

Application filed March 3, 1904. Serial No. 196,392.

To all whom it may concern:

Be it known that I, RUDOLF HENNIG, a subject of the Emperor of Germany, residing at Zweibrücken, Pfalz, Bavaria, Germany, have invented certain new and useful Improvements Relating to Ignition - Gear for Internal-Combustion Engines, of which the following is a specification.

This invention has for its object, in order to obtain the maximum thermal duty from the explosive gases, to vary, by automatic mechanism, the time of ignition of the compressed mixture of air and gas in the cylinder of the internal combustion engine, so that the combustion of the mixture of air and gas takes place as nearly as possible in the neighborhood of the inner dead point. Such variation or control of the time of ignition is necessary, since, when the engine is running with a light load, the mixture of gas and air is mixed with a greater quantity of the exhaust gases and burns more slowly than when the engine is running with a heavy load; such variation is also required when the speed of the engine is altered, since the released elements of the ignition-mechanism require time to effect the interruption of the current.

The variation in the time of ignition is generally effected by hand in a known manner, more especially on starting the engine, where the speed of rotation must increase from zero to the normal. On the other hand, within the range of speeds in which the governor acts, fine adjustment by hand is extremely difficult. It, therefore, follows that this fine adjustment should be effected by the governor and the coarse adjustment by hand.

The fine adjustment by the governor, according to practical experiments, must take place in such a manner that the time of ignition for an equal interval of range of load must be altered less by the governor at full load than at light loads, since with a light load the gaseous mixture in the cylinder highly charged with exhaust-gases requires much more time for combustion than the mixture used at full load. Thus, for a certain range, near full load, the time of ignition is hardly altered at all, but for the same range of load near the point of running idle, the time of ignition is altered very considerably. Moreover it is necessary to be able to adjust by hand, during running, the whole range of variation to be produced by the governor, since this range differs with different kinds of gas.

This invention takes account of these considerations and permits the time of ignition to be altered by hand during running of the engine; the time of ignition to be altered by the governor by a definite amount or degree from the maximum to the minimum load, this degree to be regulated practically by hand and to be fixed during running of the engine; and the adjustment of the point of ignition to be effected more rapidly by the governor at light load than at full load.

In the drawings:—Figure 1 is a sectional view of an explosive engine provided with an ignition gear constructed in accordance with the present invention. Fig. 2 is a detail elevation on an enlarged scale of the present ignition gear. Figs. 3 and 4 are detailed elevations of the governor mechanism in two different positions thereof. Fig. 5 is a fragmentary longitudinal sectional view illustrating the manner of mounting, and certain gear connections of the governor.

The governor shaft is designated *a* and rotates at the same speed as the engine shaft (not shown). The governor *G*, mounted on the way or side shaft *a* is of wheel form and is provided with the pivotally attached governor weights *g* which are pressed inward by spiral springs *g'*. Rack bars *i'* and *i''* are pivoted at the free ends of the weights *g*, the said bars being guided in their movements by rollers *g''*.

The bars *i'* and *i''* engage relatively opposite sides of a pinion *i* which is disposed in a recess *a'* of an enlargement *a'* of the shaft *a*. The pinion *i* is carried on a shaft *a''* which is disposed in a hollow shaft *a''* forming in effect an axial continuation of the shaft *a* and projecting integrally from the enlargement *a'* thereof, a bushing *a''* being interposed between the shafts *a'* and *a''*, the ends of which shafts are supported in bearings *m*.

The shaft *a'* carries an eccentric *b* which coöperates with an eccentric strap *c* having a projecting radial arm *e*. A link *k* is pivoted to the upper end of the latter and likewise to a rod *v* near the lower end thereof. The said rod *v* at its upper end is pivoted to a disk *q* having a central axis *p*, and at its lower end carries a roller *y* which is always engaged by a cam or tappet *n*. The latter is carried by a shaft *o* which rotates at half of the speed of the governor shaft *a* from which it is driven by suitably proportioned gear wheels shown by dotted lines in Fig. 1.

The disk *q* is held so that the roller *y* of the

rod *v* is always in contact with the cam or tappet *n* and for this purpose a spring *r* is employed. Said disk *q* is provided with a pawl *s* which engages and acts upon the spring controlled actuating or snap lever *t* of the magneto *u*, from which motion is transmitted in a well known manner to the ignition or contact breaker means.

The arm *e*, above referred to, passes through a guide member *f* which is pivotally mounted as at 2 in a bracket or slide piece *f'*, the latter being adjustable longitudinally of a frame *h* by suitable screw mechanism which is operated by a hand wheel *h'*. The frame *h* is formed at its lower end to surround a fixed shaft *h²* which forms a pivotal axis for the frame in its adjustable movement, a set screw *j* threaded through the frame and engaging the shaft *h²*, serving as a means to hold said frame at selected positions to which it may be adjusted.

The movement of the rod *v* to effect the ignition of the gases is controlled by the portion of the curved face of the cam *n* which lies between the points 8 and 9, the arc thus indicated having its radius from the point 6. The snapping off operation of the lever *t* from the pawl *s* occurs at some point (hereinafter termed the operating point) along the arc 8, 9, this point being in the line 5, 6, as shown in Fig. 1. It follows that the snapping off operation is timed in accordance with the location of the operating point. The cam *n* turns counterclockwise and therefore if this operating point be located at the right of the line 5, 6, when it contacts with the roller *y*, an earlier snapping off occurs and at the left of said line, a later snapping off occurs.

The position of the operating point is determined by the position of the roller *y* of the rod *v* with relation to the operating face 8, 9 of the cam *n*. The adjustment of the position of the rod *v* on its pivot 4, for the purposes of changing the operating point and consequently the time of snapping off is effected in the two ways above indicated, first, manually by manipulating the hand wheel *h'* so as to move the arm *e* about the center of the eccentric *b* as an axis, whereby the link *k* and rod *v* will be correspondingly moved, and second, by the governor, in which operation the relation of the eccentric *b* toward the shaft *a* is changed, it being understood that the eccentric *b* rotates at the same speed as the shaft *a* and that the changed relation thereof is effected by causing the shifting of said eccentric in advance of the shaft *a* to cause an earlier snapping off, or the retardation of the eccentric with respect to the shaft *a* to cause a later snapping off, this movement of the eccentric with relation to the shaft *a* extending through an angle of approximately 140°. It is to be understood that the point *e* when the snapping off takes place, is situated on the

upper portion of the curve described by it and adjacent to the frame *h*.

When the eccentric *b* turns in advance of the shaft *a*, the lower end of the arm *e* is shifted toward the right and the upper end of said arm toward the left with corresponding movements of the link *k* and rod *v*. When the eccentric *b* is retarded, the lower end of the arm *e* is shifted toward the left and the upper end of said arm toward the right with corresponding movements of the link *k* and rod *v*.

During the rotation of the shaft *a*, the upper end of the arm *e* describes an ellipse, a portion of the curvature of which figures in the operative movement of the rod *v* in any of the positions in which the above described operating points may be varied, through the operation of either of the two means provided for this purpose.

Under different conditions of working, it may be desired to vary the range of adjustment of the governor means and consequently the range of movement of the rod *v* and this is accomplished by changing the location of the pivot 2 so as to increase or decrease the amplitude of movement of the upper end of the arm *e* in the direction of the link *k* and to accordingly vary the dimension of the elliptical curve in the direction of said link, the other dimension of said curve which is in the direction of the arm *e* being constant. In changing the location of the pivot 2, the frame *h* is turned on the shaft *h²* toward or away from the shaft *a* as far as necessary, and the screw *j* is tightened after the adjustment has been made so as to hold said frame against further movement. Movement of the frame *h* away from the shaft *a* reduces the variable dimension of the aforesaid elliptical curve and movement of the frame toward said shaft increases the variable dimension of the curve.

Having fully described my invention, I claim:—

1. An ignition-gear for internal-combustion engines, comprising a magneto-electric generator, a spring controlled actuating or snap lever for said generator, a rotary way- or side-shaft, a governor, an eccentric rotatably mounted on said shaft and controlled by said governor, a rod actuated by said eccentric, a pivotally-mounted guide for said eccentric-rod, a transversely-adjustable frame for said guide, a rotary cam, a rod one end of which presses against said cam, a link connecting said end of said rod to the free end of said eccentric-rod, a disk oscillated by said rod and a pawl on said disk coacting with the actuating or snap-lever of said magneto-electric generator.

2. An ignition-gear for internal-combustion engines, comprising a magneto-electric generator, a spring controlled actuating or snap lever for said generator, a rotary way-

or side-shaft, a governor, an eccentric rotatably mounted on said shaft and controlled by said governor, a rod actuated by said eccentric, a pivotally-mounted guide for said eccentric-rod, a guide-frame arranged transversely to said eccentric-rod, a support for said guide-frame, means for clamping said frame to said support, a slide-piece bearing said eccentric-rod-guide and arranged in said guide-frame, means operated by hand for moving said slide-piece in said guide-frame, a rotary cam, a rod one end of which presses against said cam, a link connecting said end of said rod to the free end of said eccentric-rod, a disk oscillated by said rod, and a pawl on said disk coacting with the actuating or snap-lever of said magneto-electric generator.

3. An apparatus for controlling the time of

ignition in explosive engines, comprising an oscillatory rod, means engaging said rod for oscillating it, a governor for controlling the said oscillation, a second rod engaging said oscillating rod, actuating means for said second rod, an ignition gear connected to the said second rod and an adjusting device engaging said oscillating rod at a point intermediate the points of engagement of said oscillating means and said second rod and adapted when adjusted to alter the axis of oscillation of said oscillating rod.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

RUDOLF HENNIG.

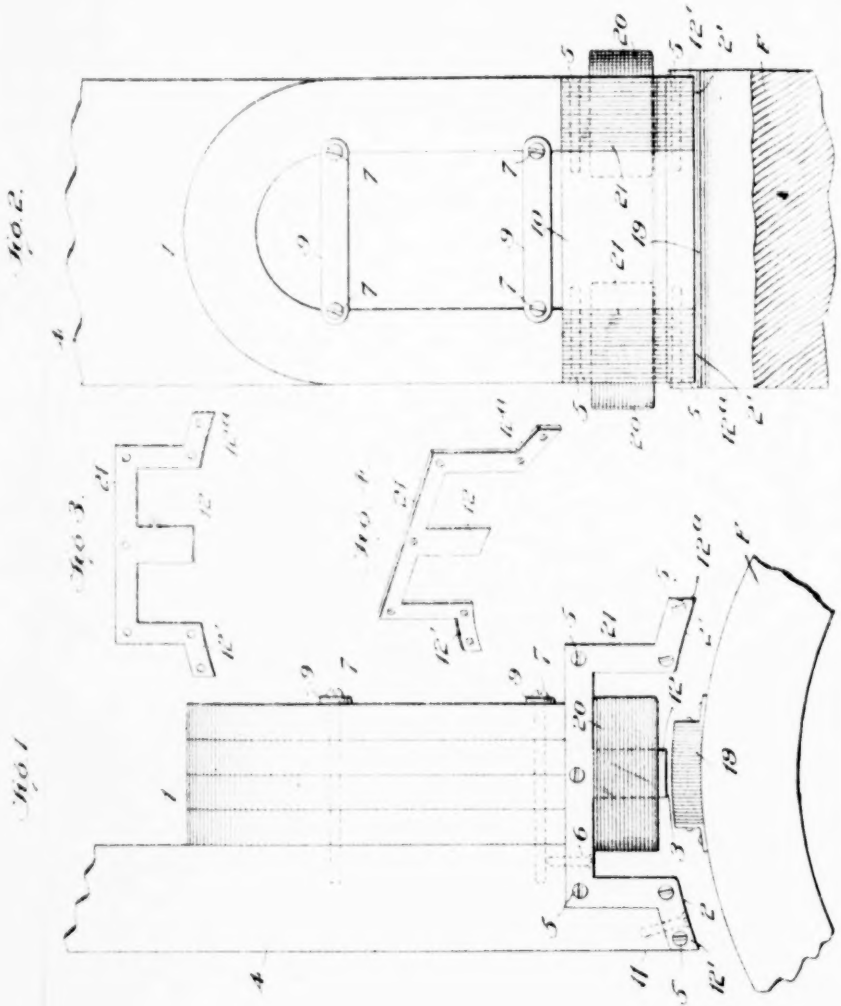
Witnesses:

GREGOR LOESCH,

OTTO HEYER.

947,647.

Patented Jan. 25, 1910.



Witnesses

Edwin L. Bradford
C. C. Wright

By

Inventors
Henry Joseph Podlesak
Tested Emil Podlesak
Henry J. Podlesak
Attorney

UNITED STATES PATENT OFFICE.

HENRY JOSEPH PODLEŠÁK, OF CHICAGO, ILLINOIS, AND TESLA EMIL PODLEŠÁK, OF MORRISTOWN, NEW JERSEY.

INDUCTOR-GENERATOR FOR IGNITION PURPOSES.

947,647.

Specification of Letters Patent.

Patented Jan. 25, 1910.

Original application filed September 25, 1901, Serial No. 76,559. Divided and this application filed January 28, 1908, Serial No. 413,070. Renewed February 10, 1909. Serial No. 477,251.

To all whom it may concern:

Be it known that we, HENRY JOSEPH PODLEŠÁK and TESLA EMIL PODLEŠÁK, residing at Chicago, in the county of Cook and State of Illinois, and Morristown, county of Morris, State of New Jersey, respectively, have invented certain new and useful Improvements in Inductor-Generators for Ignition Purposes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to inductor alternators for ignition purposes. It essentially pertains to inductor alternators capable of producing electrical effects suitable for the ignition of combustible charges in internal combustion motors. It is for a division of the subject matter shown and disclosed in our application for Letters Patent Serial No. 76,559, filed September 25th, 1901.

The principal object of this invention is to provide an inductor generator adaptable for use in connection with a reversible motor, so that the electric generator will produce the requisite electromotive force to cause a spark in the engine cylinder at the proper instant, irrespective of the direction in which the crank shaft of the engine is rotating.

Figure 1 is an edge elevation of an inductor generator embodying our improvement, a portion only of the inductor-carrying element being shown. Fig. 2 is a side elevation of the parts shown in Fig. 1. Fig. 3 is a side elevation of the pole piece, detached. Fig. 4 is a perspective view of the same.

In the drawings,—1 indicates a permanent magnet preferably horseshoe or U-shaped in form. It is composed of as many magnet sections, arranged in series, as may be required to establish the desired density of magnetic field.

4 is a frame, preferably of non-magnetic material, and employed to position and support in proper relation to each other the normally stationary parts of our inductor alternator.

9 are clamp pieces or cleats arranged to bear against the outermost magnet section in the series, and 7 are bolts or screws extending through said cleats and into the frame 4, and adapted to clamp or bind the said frame and permanent magnets together.

21 are pole pieces composed of a suitable member of punchings or laminae. A pair of these pole pieces is preferably used, assembled, one at either side of a suitable center piece or spacing piece 10 of non-magnetic material, and suitably bolted thereto by means of bolts 5. This non-magnetic spacing piece 10 is suitably secured to the frame 4 by means of bolts or screws 6 and 11, so as to hold the laminated pole pieces 21 in close magnetic contact with the ends or poles of the permanent magnet sections.

As shown, each one of the pole pieces has three polar projections, the center one of which serves as a coil core, and is indicated as 12, the ones at either side of it being unwound and indicated as 12' and 12'', respectively. A winding or coil 20 of insulated wire is slipped upon and suitably secured to the middle polar projection or coil core on each pole piece. The outer faces or polar faces of the polar projections 12, 12', and 12'', are suitably shaped to conform to the path of travel of a suitable inductor, hereinafter described. The polar faces on the polar projections 12, 12', are designated by 2, 2', respectively, and hereinafter referred to as exciting polar faces, and the polar faces on the polar projections 12, are designated by 3, and hereinafter referred to as generating polar faces.

19 is an inductor, preferably formed of punchings or laminae of suitable metal. This inductor is adapted to be rotated in either direction, so as to have one of its faces pass over and closely adjacent to the polar faces of the polar projections on the pole pieces by mere mechanical clearance, or, in other words, as close to said polar faces as mechanical conditions will permit. The said inductor 19 is connected with and carried by a wheel or disk F, only part of which is shown. This wheel F may be of any suitable construction, and may be the fly wheel of a motor, to the ignition apparatus of which, the induction windings of the generator are connected. The polar faces 2, 2', 3 and the face of the inductor which passes adjacent to them, are preferably shaped to the arc of a circle struck from the axis of the wheel F as a center.

Normally the lines of magnetic force emanate in a scattered way from all sides of the magnet and for about one-half of its

length from its free ends, and some of these lines of force emanate from the pole pieces. The inductor 19, when rotated in clockwise direction, first spans the exciting polar faces 2 and causes the concentration of a dense flow of magnetic lines of force, a substantial magnetic short circuit, between the polar projections 12' of the laminated pole pieces. The inductor then moves across the air gap between the exciting polar faces 2 and the generating polar faces 3 and causes a rapid and substantially complete diversion of the magnetic flux density, first concentrated across the exciting polar faces, into and through the coil cores 12 and across the generating polar faces, so as to establish a substantial magnetic short circuit across the generating polar faces. The inductor then leaves the generating polar faces, crosses the air gap between them and the exciting polar faces 2', and the magnetic flux density through the induction windings is rapidly diminished, a substantial magnetic short circuit being established outside of them.

If the inductor 19 is rotated in anti-clockwise direction, it first concentrates the lines of magnetic force across the exciting polar faces 2', 2', then across the generating polar faces, and then across the exciting polar faces 2, 2. It will thus be seen that in either direction of rotation the inductor operates to bring about similar variations of magnetic flux density in the induction windings. This we have found to be of great importance where our electric generator is used with a reversible motor, as it insures similarly satisfactory ignition in either direction of rotation of the motor.

With an inductor alternator constructed in accordance with our invention, the inductor does not at any time move sufficiently closely to the limbs of the magnets themselves to draw or concentrate a dense magnetic flux across the limbs of the magnets above the poles thereof, but on the contrary, we have so constructed and arranged the elements of an inductor alternator for ignition purposes, that the inductor in its operation tends only to draw or concentrate the magnetic flux emanating from the magnet poles at the said magnet poles, thereby tending to prevent the shifting of the said poles and to overcome the tendency of the said poles to shift, with the consequent loss of magneto-motive force by the magnets.

The electro-motive force is generated in the inductive windings 20, as in all dynamo-electric generators, by varying the magnetic flux density in the said windings. The inductor 19 operates to cause a very rapid varying of the magnetic flux density by first establishing a substantial magnetic short circuit, *i. e.*, by concentrating the magnetic flux at a point adjacent to but outside

of the induction windings, so that the magnetic flux density in the cores of said windings is practically zero, then quickly diverting the magnetic flux through the coil cores, and then, practically instantly, establishing a magnetic short circuit outside of the coil cores and causing the magnetic flux density in said coil cores to again drop to substantially zero.

With multi-cylinder motors, two or more inductors are used, there being one inductor for each cylinder, as will readily be understood, unless the periods of ignition of two or more of said cylinders occur at the same period of the stroke at alternate revolutions. In any case, an inductor must be provided and so arranged that it will pass over and span the generating polar faces when the ignition of a combustible charge is required. Also, when the motor is arranged for two or more ignitions, usually termed "late, early," etc., it may prove desirable to use one inductor for each of such ignitions, and to mount and hold stationary the permanent magnet and induction windings.

What we claim is—

1. In an inductor generator for ignition purposes, the combination of a permanent magnet, a pair of pole pieces each held in magnetic contact with one pole of said magnet and having three polar projections, a coil of wire in inductive relation to the middle polar projections on said pole pieces, and an unwound inductor movable relative to said polar projections to concentrate the magnetic flux emanating from the poles of said magnet first outside of said wire wound polar projections and between said pole pieces, then across said wire wound polar projections and then outside of said wire wound polar projections and between said pole pieces in rapid succession.

2. In an inductor generator for ignition purposes, the combination of a field magnet, a pair of pole pieces each in magnetic contact with one of the poles of said field magnet and having three polar projections, two coils of wire, one in inductive relation to the middle polar projection on one pole piece and the other in inductive relation to the middle polar projection on the other pole piece, and an unwound inductor movable in either direction to concentrate between said pole pieces the magnetic flux emanating from the poles of said magnet, first across unwound polar projections, then across the said wound middle polar projections and then across the other unwound polar projections.

3. In an inductor generator for ignition purposes, the combination of a permanent magnet, laminated pole pieces in magnetic contact with the poles of said magnet, each pole piece having a coil core and polar pro-

jections with exciting polar faces on opposite sides of said coil core, coils of insulated wire in inductive relation to said coil cores, and a laminated unwound inductor mounted on a rotatable support.

4. In an inductor generator for ignition purposes, the combination of a permanent magnet, pole pieces in magnetic contact with the poles of said magnet, each pole piece having three polar projections, coils of insulated wire in inductive relation to the middle polar projection on said pole pieces, the other polar projections on each pole piece being unwound, and an unwound inductor movable relative to said polar projections.

5. In an inductor generator for ignition purposes, the combination of a permanent magnet, a pair of pole pieces, each in magnetic contact with one of the poles of said magnet, one of said pole pieces carrying three polar projections having polar faces arranged in series in the arc of a circle, a coil of insulated wire in inductive relation to the middle polar projection of said series, the polar projections at either side of said middle one being unwound, and an inductor rotatable in either direction relative to the polar faces of said polar projections to intermittently establish substantial magnetic-short circuits between each one of said polar projections and the opposite pole piece.

6. In an inductor generator for ignition purposes, the combination of a permanent magnet, a pair of pole pieces, each in magnetic contact with one of the poles of said magnet and having three polar projections each provided with polar faces, an induction winding on the middle projection of each one of said pole pieces, and an unwound rotatable inductor shaped and correlated to the said polar faces on said pole pieces and arranged when rotated in either direction to first concentrate the lines of magnetic force emanating from said magnet poles between said pole pieces outside of said induction windings, then rapidly to divert the magnetic flux through said induction winding, and then as rapidly divert said magnetic

flux outside of said induction windings, and between said pole pieces.

7. In an inductor generator for ignition purposes, the combination of a bi-polar permanent field magnet, a pair of pole pieces, each held in magnetic contact with one of the poles of said field magnet and in suitable relation to each other, and each having three polar projections, each of which terminates in a polar face, two coils of wire, each wound in inductive relation on the middle polar projection of each said pole piece, a movable unwound inductor, arranged to establish, by its movements, a magnetic path through itself and alternately through the unwound polar projections and the wound polar projections of the said pole pieces.

8. In an electric generator, the combination of a field magnet provided with pole pieces, three polar projections carried by one of said pole pieces, a winding on the middle polar projection, and an unwound inductor adapted cyclically to short-circuit the magnetic flux outside of said winding, then divert the flux through said winding, and then again divert the flux outside the winding.

9. In an electric generator, the combination of a field magnet provided with pole pieces, three polar projections carried by each of said pole pieces, windings on the middle polar projections, and an unwound inductor adapted cyclically to short-circuit the magnetic flux outside of said windings, then divert the flux through said windings, and then again divert the flux outside the windings.

In witness whereof we affix our signatures, in the presence of witnesses.

HENRY JOSEPH PODLEŠÁK.

TESLA EMIL PODLEŠÁK.

Witnesses to the signature of Henry Joseph Podlešák:

J. ŠŮBEK,

J. TOMÁSEK.

Witnesses to the signature of Tesla Emil Podlešák:

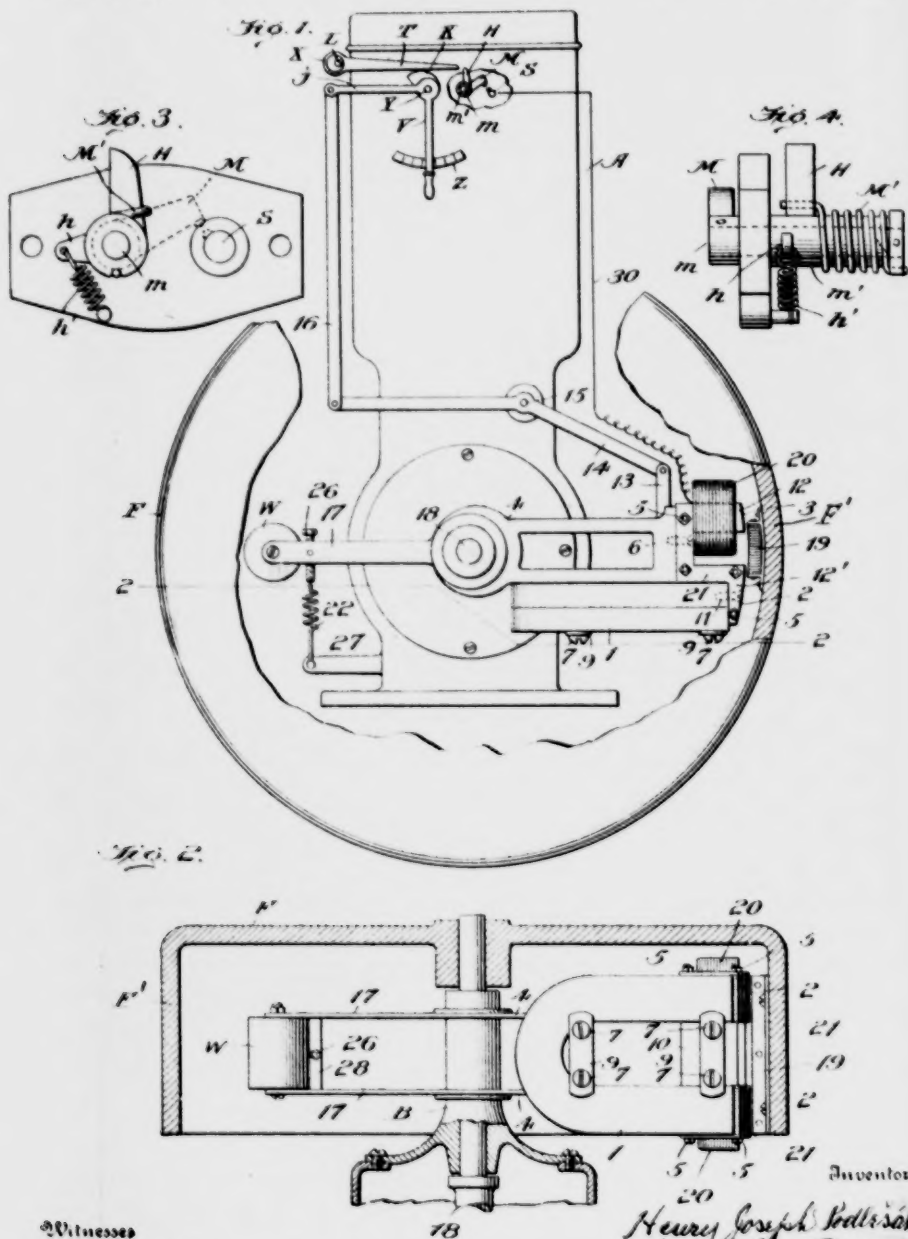
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JOHN H. BONSALE.

H. J. PODLEŠÁK & T. E. PODLEŠÁK.
INDUCTOR GENERATOR FOR IGNITION PURPOSES.
APPLICATION FILED JAN. 28, 1908.

948,483.

Patented Feb. 8, 1910.



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C. B. Wright

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HENRY JOSEPH PODLEŠÁK, OF CHICAGO, ILLINOIS, AND TESLA EMIL PODLEŠÁK, OF MORRISTOWN, NEW JERSEY.

INDUCTOR-GENERATOR FOR IGNITION PURPOSES.

948,483.

Specification of Letters Patent.

Patented Feb. 8, 1910.

Original application filed September 25, 1901, Serial No. 76,559. Divided and this application filed January 28, 1908. Serial No. 413,069.

To all whom it may concern:

Be it known that we, HENRY JOSEPH PODLEŠÁK and TESLA EMIL PODLEŠÁK, residing at Chicago, in the county of Cook and State of Illinois, and Morristown, county of Morris, State of New Jersey, respectively, have invented certain new and useful Improvements in Inductor-Generators for Ignition Purposes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to ignition apparatus for internal combustion engines.

The subject matter herein presented is for a division of the subject matter presented in our application, Serial No. 76,559, filed September 25th, 1901, for inductor generators for ignition purposes.

One of the objects of our invention is to provide an inductor alternator which is readily adaptable to all classes of internal combustion motors, such as automobile, marine, and stationary motors, and to the special requirements of each class, and is readily adjustable for varying the period of generation of maximum electro-motive force relative to the position of a piston within an engine cylinder.

Another object of our invention is to so connect and correlate an electric generator to the ignition apparatus of an internal combustion motor, that the ignition apparatus and the said generator are simultaneously adjusted for the purpose of causing a spark to occur earlier or later in the stroke of the motor piston. This simultaneous adjustment of the electric generator with the ignition apparatus is for the purpose of insuring that the generator will produce the requisite electro-motive force for any position of adjustment of the ignition apparatus.

Still another object of our invention is to arrange and mount an electric generator in the fly wheel of an engine in such manner that the parts of the generator will be completely protected.

Figure 1 is a side elevation of a motor fitted with an inductor alternator embodying our invention, the fly wheel of the motor being shown partly broken away and partly in section. Fig. 2 is a section on the line 2—2, Fig. 1. Fig. 3 is an end elevation of parts of the igniter apparatus, detached. Fig. 4 is a side view of the parts shown in Fig. 3.

In the drawings—A represents an internal combustion motor of any well known construction.

B indicates the crank shaft bearing on the fly wheel side of the motor, the crank shaft itself being represented by 18.

F is the fly wheel of the motor having an inwardly extending flange F'.

1 indicates a permanent magnet, preferably horseshoe or U-shaped in form. It is composed of as many magnet sections, arranged in series, as may be required to establish the desired density of magnetic field.

4 is a frame, preferably of non-magnetic material, and employed to position and support in proper relation to each other the normally stationary parts of our inductor alternator. In the drawings, this supporting and positioning frame is mounted upon the crank shaft bearing B, and is capable of adjustment about the axis of the said crank shaft.

9 are clamp pieces or cleats arranged to bear against the outermost magnet section in each series, and 7 are bolts or screws extending through said cleats and into the frame 4, and adapted to clamp or bind the said frame and permanent magnet together.

21 are pole pieces composed of a suitable number of punchings or laminæ. A pair of these pole pieces is preferably used, assembled, one at either side of a suitable center piece or spacing piece 10 of non-magnetic material, and suitably bolted thereto by means of bolts 5. This non-magnetic spacing piece 10 is suitably secured to the frame 4 by means of bolts or screws 6 and 11, (shown in dotted lines), so as to hold the

laminated pole pieces 21 in close magnetic contact with the ends or poles of the permanent magnet sections.

Each one of the pole pieces has a pair of polar projections 12, 12', the former of which serves as a coil core upon which a winding or coil 20 of insulated wire is slipped, and to which the said coil is suitably secured. The coil core 12 on each pole piece is spaced by a suitable air gap from the adjacent polar projection 12' on said pole piece. The outer faces or polar faces of the said polar projections 12, 12', are suitably shaped to conform to the path of travel of a suitable inductor, hereinafter described. The polar faces on the polar projections 12' are designated by 2, and hereinafter referred to as exciting polar faces, and the polar faces on the polar projections 12 are designated by 3, and hereinafter referred to as generating polar faces.

19 is an inductor, preferably formed of punchings or laminae of suitable metal. This inductor is adapted to be rotated so as to have one of its faces pass over and closely adjacent to the exciting polar faces 2 and the generating polar faces 3, by mere mechanical clearance, or, in other words, as close to said polar faces as mechanical conditions will permit. We have shown the said inductor 19 as secured to and carried by the flange F' of the fly wheel F of the motor. The polar faces 2, 3, and the face of the inductor which passes adjacent to them are shaped to the arc of a circle struck from the axis of the crank shaft as a center.

Normally the lines of magnetic force emanate in a scattered way from all sides of the magnet and for about one-half of its length from its free ends, and some of these lines of force emanate from the pole pieces. The inductor 19, in operation, first spans the exciting polar faces 2 and causes the concentration of a dense flow of magnetic lines of force, a substantial magnetic short circuit, between the polar projections 12', 12', of the laminated pole pieces. The inductor then moves across the air gap between the exciting polar faces and the generating polar faces and causes a rapid and substantially complete diversion of the magnetic flux density, first concentrated across the exciting polar faces, into and through the coil cores 12 and across the generating polar faces, so as to establish a substantial magnetic short circuit across the generating polar faces. The inductor then leaves the generating polar faces, and the magnetic flux density through the induction windings is rapidly diminished, due to the fact that the lines of magnetic force instantly seek the path of least reluctance between the magnet poles.

In Figs. 1 and 2, the frame 4 of the in-

ductor alternator is shown pivoted or journaled on the bearing B of the crank shaft at one side of the motor, as hereinbefore mentioned, in order that it may be oscillated through a part of a revolution to vary the instant of generation of maximum electromotive force, so as to accommodate the generator for operation with mechanism for varying the period of ignition within the engine cylinder.

13 is a link connected at its lower end with the generator frame, and having its upper end suitably connected to one end of a lever 14, which is pivoted at 15 to the frame of the motor.

The mechanism for advancing or retarding the time of ignition within the engine cylinder may be of any suitable and well known type. For the purpose of illustrating our invention, we have shown in the drawings, more or less diagrammatically, such a mechanism.

K is a cam connected to move with a bell crank lever V, said lever being pivoted at Y to the cylinder of the motor, and adapted to be oscillated and retained in any desired position of adjustment by the engagement of its downwardly extending arm with one of the teeth of a rack section Z.

16 is a link connected at its lower end to the upper end of the lever 14, and having its upper end connected to the outer end of the arm j of the bell crank lever V.

The make and break ignition mechanism for the engine may be of any well known and suitable construction. We have shown it as embodying the general features of construction and operation disclosed in Letters Patent of the United States No. 630,624, to C. H. Morse, Jr., and F. G. Hobart, for gas engine igniter, dated August 5th, 1899.

S is a suitably insulated stationary electrode.

M is the movable electrode having a shaft *m* extending through one wall of the cylinder. Upon the outer end of the shaft *m* is loosely mounted a sleeve *m'* having an upwardly projecting arm H and a laterally projecting arm *h*.

h' is a spring having one end secured to the free end of the arm *h* and its other end connected to the motor cylinder and arranged to normally hold the electrodes M and S out of contact with each other.

M' is a coiled spring arranged around the electrode shaft *m* and between its outer end and the sleeve *m'* thereon, so as to form a flexible connection between the said sleeve and shaft, which will permit the sleeve to rotate relative to the shaft against the action of said spring.

T is a reciprocable trip rod, which has one end mounted on an eccentric X carried by

the shaft L, the latter being driven from a suitable member of the motor. The driving connection for the shaft L has, for the sake of clearness, not been shown. The trip rod T rests upon and is guided by the cam K, and at its free end is arranged to engage the upper end of the electrode-operating arm H. During the operation of the motor, the trip rod T at the proper instant, engages the arm H and moves the said arm so as to cause the movable electrode M to engage the stationary electrode S. The trip rod then passes or trips off the arm H, and the spring *h'* immediately causes the separation of the electrode M from the electrode S, at which interval the spark occurs between the electrodes. By adjusting the cam K, the trip rod T is caused to bring about the separation of the electrodes and the consequent creation of a spark earlier or later in the stroke of the piston.

Adjusting the bell crank lever Y to the left, or clockwise, will turn the cam K so as to elevate the free end of the trip rod T. This will cause the earlier disengagement of the electrodes within the cylinder, thus advancing the time of ignition. Adjusting the bell crank lever Y to the right, or anti-clockwise, will relatively lower the free end of the trip rod T, which will cause a later separation of the electrodes within the engine cylinder and the consequent retardation of the time of ignition. The connections between the said bell crank lever V and the frame 4 are so proportioned and correlated that, as the period of ignition in the cylinder is changed by the operation of the bell crank lever to either advance or retard the spark, the electric generator is also shifted or adjusted into a position to generate the requisite electro-motive force at the moment the electrodes of the make and break apparatus in the cylinder separate to produce the desired spark.

W is a weight secured between the arms 17 extending from the frame 4, the said weight being suitable to counterbalance the weight carried at the opposite end of the said frame 4. 22 is a spring having its lower end attached to a bracket 27 carried by the motor frame, and its upper end secured to an adjusting screw 26 which extends through a cross bar 28 carried by the arm 17. This spring serves to supplement the weight W and affords an additional means for facilitating the adjustment of the electric generator.

The winding on each pole piece may be in one or more separate coils of any suitable construction, all of which are suitably and properly connected together, either in parallel or in series, as may be desired. A suitable connection from the terminals of the

induction windings may be made with the electrodes of the igniter mechanism. For this purpose we have shown an insulated electric conductor 30 electrically connecting the stationary electrode S with the generating windings of the electric generator. The movable electrode M is suitably grounded.

In the embodiment of our invention herein set forth and described for the purpose of illustration, we have shown one of our generators arranged within the fly wheel in protected position and in such manner as to economize space, which is of considerable importance in small motors, especially for automobile and marine work.

What we claim is—

1. In an apparatus of the class described, the combination of an igniter-mechanism associated with an internal-combustion engine, a shaft projecting from the engine-casing, a magnetic field-frame adjustably mounted upon said shaft and provided with a winding, a movable inductor for varying the magnetic flux through said winding, an arm pivotally connected at one end with said field-frame and at the other end with said igniter-mechanism, and means for actuating said arm for simultaneously adjusting said igniter-mechanism and said field-frame.

2. In an apparatus of the class described, the combination of an igniter-mechanism associated with an internal-combustion engine, a shaft projecting from the engine-casing, a frame of non-magnetic material adjustably mounted upon said shaft, a permanent magnet secured to said frame and provided with a winding, a movable inductor for varying the magnetic flux through said winding, an arm pivotally connected at one end with said field-frame and at the other end with said igniter-mechanism, and means for actuating said arm for simultaneously adjusting said igniter-mechanism and said field-frame.

3. In an apparatus of the class described, the combination of an igniter-mechanism associated with an internal-combustion engine, a shaft projecting from the engine-casing, a magnetic field-frame adjustably mounted upon said shaft and provided with a winding, a flywheel supported by said shaft, an inductor carried by said flywheel for varying the magnetic flux through said winding, an arm pivotally connected at one end with said field-frame and at the other end with said igniter-mechanism, and means for actuating said arm for simultaneously adjusting said igniter-mechanism and said field-frame.

4. In an apparatus of the class described, the combination of an igniter-mechanism associated with an internal-combustion engine, a shaft projecting from the engine-

casing, a frame of non-magnetic material adjustably mounted upon said shaft, a permanent magnet secured to said frame and provided with a winding, a flywheel supported by said shaft, an inductor carried by said flywheel for varying the magnetic flux through said winding, an arm pivotally connected at one end to said frame and at the other end with said igniter-mechanism, and means for actuating said arm for simultaneously adjusting said igniter-mechanism and said field-frame.

In witness whereof we affix our signatures, in the presence of two witnesses.

HENRY JOSEPH PODLEŠÁK.
TESLA EMIL PODLEŠÁK.

Witnesses to the signature of Henry Joseph Podlešák:

J. SOBEK.

F. PTÁČEK.

Witnesses to the signature of Tesla Emil Podlešák:

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SPARKING IGNITER.
APPLICATION FILED JUNE 1, 1910.

990,935.

Patented May 2, 1911.

3 SHEETS-SHEET 1

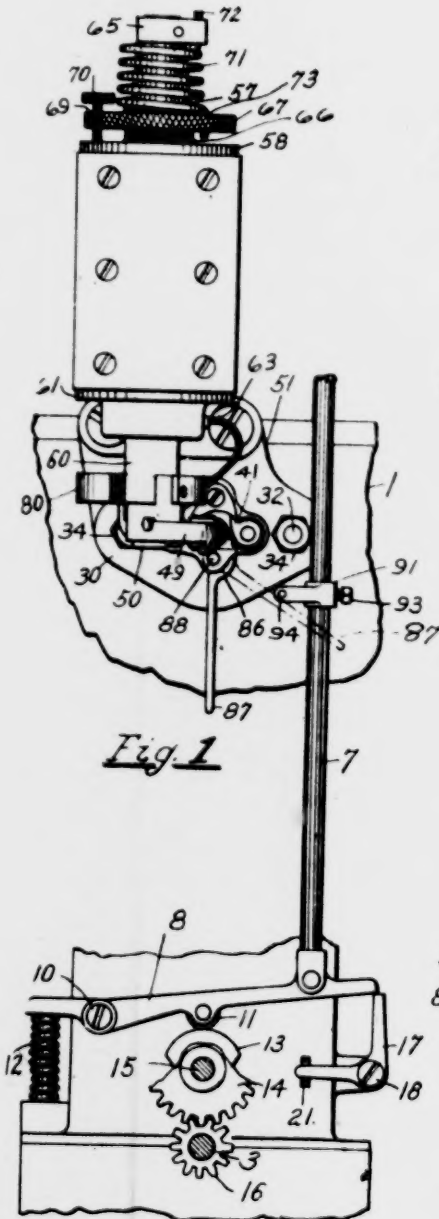


Fig. 1

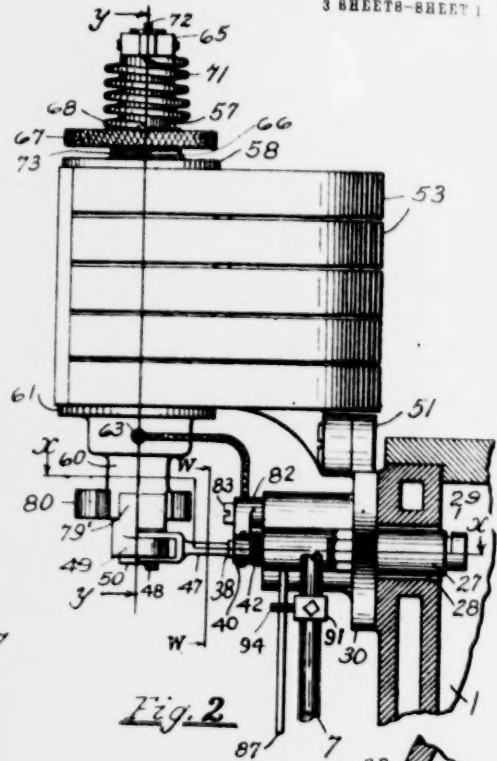


Fig. 2

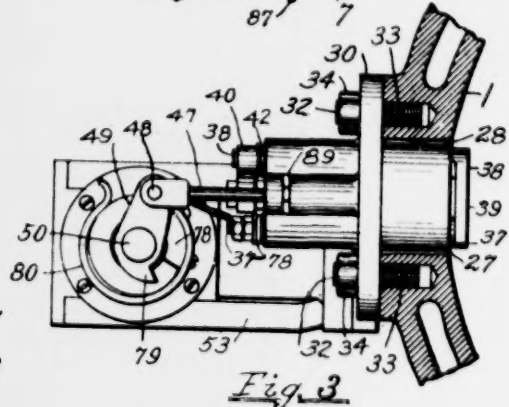


Fig. 3

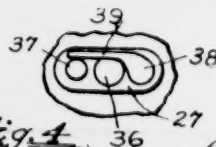


Fig. 4

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APPLICATION FILED JUNE 1, 1910.

990,935.

Patented May 2, 1911.

3 SHEETS-SHEET 2

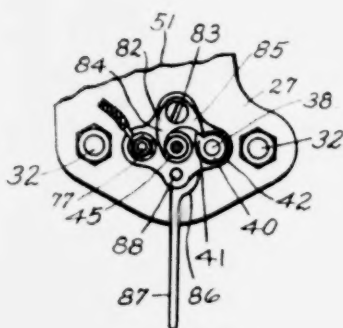


Fig. 5

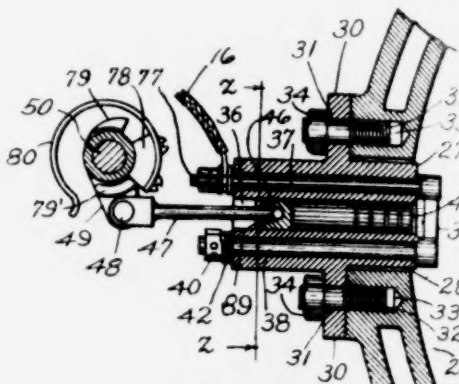


Fig. 6

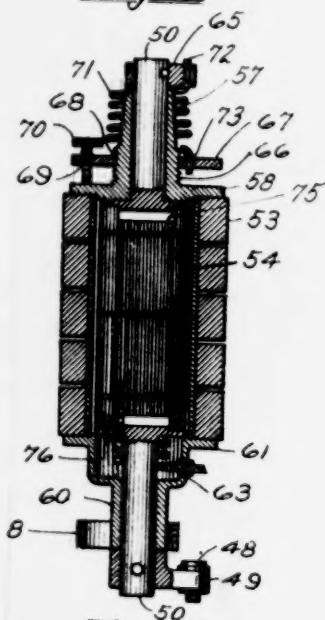


Fig. 7

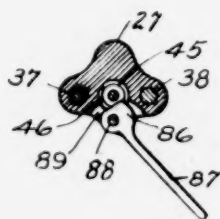


Fig. 8

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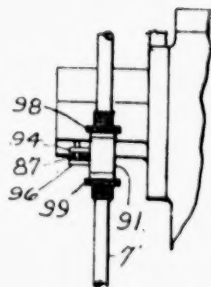
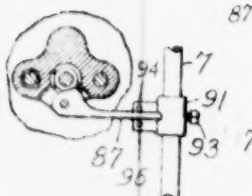
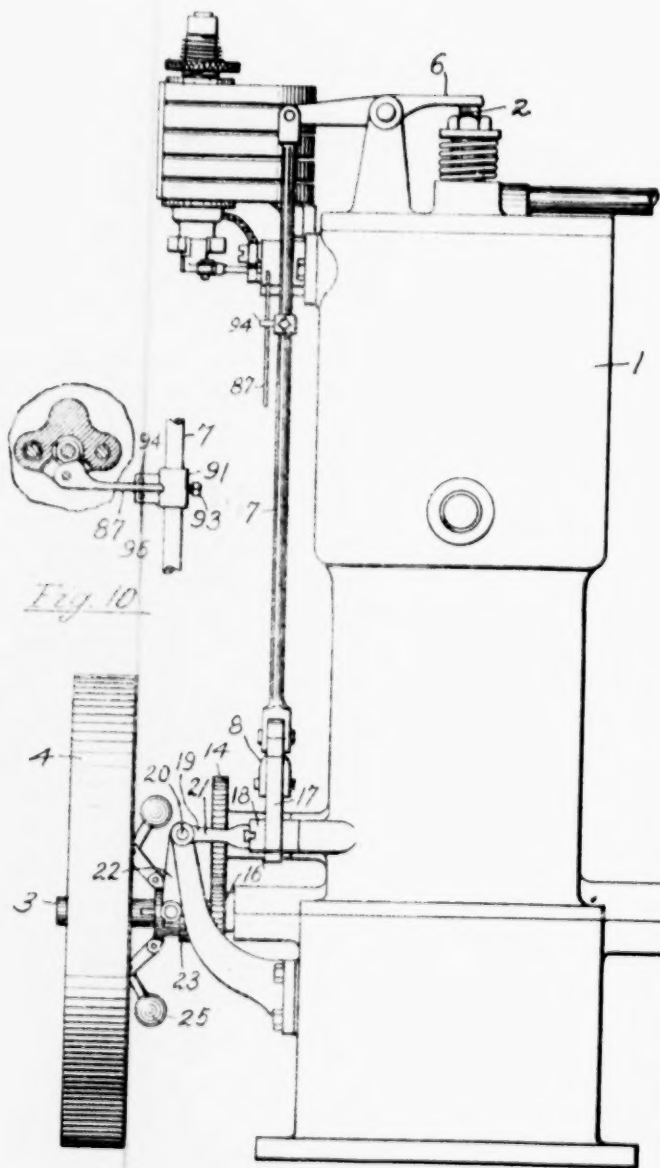
SPARKING IGNITER.

APPLICATION FILED JUNE 1, 1910.

990,935.

Patented May 2, 1911

3 SHEETS—SHEET 3.



Witnesses:
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 By Attorney
Horatio E. Bellows

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MATIE C. MESSLER, OF PAWTUCKET, RHODE ISLAND.

SPARKING IGNITER.

990,935.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed June 1, 1910. Serial No. 564,472.

To all whom it may concern:

Be it known that I, LUTHER H. WATTLES, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Sparking Igniters, of which the following is a specification.

My invention relates to sparking ignition devices for internal combustion engines. In my prior Patent No. 909,264 issued Jan. 12, 1909, is shown a device of this character wherein a sparking current is generated by the unignited compressed engine charge.

The essential objects of the present invention are to regulate the instant of sparking; to secure a maximum efficiency of the engine charge; to prevent, when starting the engine, injury to the operator due to the initial expansion of the compressed charge while manipulating the fly wheel; to afford a positive and direct electrical communication between the electrodes and the magneto armature; to cushion the outward stroke of the piston; to make it possible to dispense with elaborate mechanism for returning the piston to original position, and to dispense with the generator piston valve; to simplify and cheapen the structure; and to render the same available upon engines of various types without reorganization.

Other objects will be hereinafter pointed out.

To the above ends primarily my invention consists in the construction, combination, and mode of operation of parts set forth in and falling within the scope of the claims hereto appended.

In the accompanying drawings which form a part of this specification and in which like reference characters indicate like parts throughout the views, Figures 1, 2, and 3, are front, side and bottom plan views respectively of my novel apparatus mounted in the side of an engine cylinder, showing in Fig. 1 also a usual engine valve operating mechanism, Fig. 4, a bottom plan view of the plug, Figs. 5, 6, and 7, sections on line *w, w, x, x,* and *y, y,* of Fig. 2, Fig. 8, a section on line *z, z,* of Fig. 6, Fig. 9, a side elevation of an upright four cycle internal combustion engine equipped with my device, and Figs. 10 and 11, detail views of modified means for actuating the piston locking member.

In the illustrated construction the engine comprises a cylinder or casting 1, exhaust valve, 2, crank shaft 3, fly wheel 4, and the usual valve operating mechanism, consisting of the valve lever 6, valve connecting rod 7, cam lever 8, stud 10, cam roll 11, cam lever spring 12, cam 13 integral with driven gear 14 loose on stud 15, driving gear 16, bell crank lever 17 upon its stud 18, connecting bell crank lever 19 pivoted on stud 20 and whose forked arm 21 engages lever 17 and whose other arm 22 is connected with the sliding sleeve 23, controlled by the fly ball governor 25. It is in conjunction with the above described familiar parts that my novel device is in this instance set forth.

My device comprises a plug 27 extending into an opening 28 in the casting 1 to which it is engaged in any convenient manner with its end face exposed in the compression area of the combustion chamber 29. In the present instance the plug is provided with an external flange 30 with perforations 31 for screws 32 entering threaded openings 33 in the casting and secured by nuts 34. The plug 27 preferably extends beyond the face of the casting and is longitudinally bored to form a chamber 36. Fixed within the plug and insulated therefrom is an electrode 37, and axially movable in the plug is the grounded electrode 38 having its outer end extending beyond the face of the plug and provided with a contact arm 39 within the combustion chamber. Integral with or fixed to the outer end of the electrode 38 is a collar 40 provided with a peripheral lug 41. A spring 42 surrounding the electrode has its ends fixed in the collar and in the plug respectively. Mounted in the chamber 36 is a piston 45 provided with a beveled outer end as at 46. A connecting rod 47 connects the piston through a crank pin 48 with a crank arm 49 fixed to an armature shaft 50 of an electric generator supported by a bracket arm 51 fixed to the plug.

The generator or magneto may be of any usual construction and in this instance comprises horse shoe magnets 53 surrounding a core 54 whose armature 50 has an upper vertical bearing 57 provided with a flange or base 58 fixed to the top of the magnets. The lower end of the armature shaft is journaled in a bearing 60 provided with a flange 61 fixed to the bottom of the magnets, and provided with an opening 63 in its side wall.

Fixed to or integral with the upper end of the shaft 50 is a collar 65. The exterior of the bearing 57 has threads 66. An annular disk 67 has threads 68 engaging threads 66 and is provided with a threaded perforation 69 to receive a thumb screw 70 whose end engages the flange 58. Surrounding the bearing 57 is a spring 71 whose upper end 72 is fixed to the collar 65, and whose lower end 73 is fixed to the disk 67. One terminal 75 of the winding is grounded in the core while the other terminal 76 is formed in a loose spiral around the shaft 50 and passes through the opening 63 to the binding post 77 upon the outer end of the electrode 37, thus completing the circuit through the sparking finger 39 and thence back through the magneto to the armature.

In order to limit excessive travel of the crank arm 49 a block 78 fixed to the side of the bearing 60 extends into the path of lugs 79 and 79' upon the arm. The outward stroke of the piston is in this instance cushioned by a curved spring 80 fixed to the block 78 and whose free end is in the path of the arm 49. The spring 80 may be omitted when the spring 71 is sufficiently stiff. A member for actuating the electrode 38, as shown in Fig. 5, consists of a lever of the first principle 82 pivoted by a pin 83 to the outer face of the plug 27 and comprises an arm 84 in the path of the beveled portion of the piston 45, and an arm 85 in contact with the lug 41 upon the collar of the electrode 38.

A piston locking member, best shown in Fig. 8, comprises a cam shaped or offset flat head 86 and a shank or handle 87. This member is eccentrically mounted upon a pivot 88 in the plug and moves in a slot 89 opening into the chamber 36 and transversely thereof. When the shank 87 is in normal or vertical position the head 86 is out of the path of the piston 45, but when the shank is elevated the head intersects the path of the piston and prevents the outward stroke of the latter. This arm may be elevated manually at will to the position shown in broken lines in Fig. 1, where it is frictionally held, until released and permitted to fall into vertical position. The release is effected either manually or by any convenient device attached to the engine driven mechanism. Such a device consists of a vertically adjustable sleeve 91 clamped by an adjusting screw 93 to the reciprocating connecting rod 7, and provided with a laterally projecting pin 94 in the path of the shank 87.

The operation of my device is as follows. The unignited compressed engine charge in the combustion chamber 29 impels the armature piston 45 outwardly with great force partially rotating the armature shaft 50 at a high rate of speed thus generating a current in the electric circuit. This circuit is

broken to create a spark in the conductive chamber by the contact of the piston 45, its outward travel, with the lever arm 85 which through arm 85 partially rotates the electrode 38 thereby swinging the arm 38 out of contact with electrode 37. The electrode is returned by the spring 71, and the piston, by the spring 71. It will be noted that in the present instance the terminal 76 runs directly from the winding to the electrode without the intervention of a brush or any moving contact whereby a more positive electrical effect is secured.

In order to utilize the maximum power of the charge provision is made for regulating the instant of sparking relatively to the position of the engine crank, so that when the engine is running at high speed the sparking will occur earlier; and when at a low speed, later. These results are respectively secured by manually turning the disk 67 upwardly or downwardly to increase or decrease the tension of the spring 71. This adjustment can be made while the engine is in operation. The screw 70 binds the disk in adjusted position.

To avoid accident in starting the engine the magneto is held out of operative position by manually elevating the handle 87, thereby checking the advance of the piston 45 during the initial compression revolution of the fly wheel, after which the handle 87 is returned to normal vertical position either manually or automatically thereby releasing the armature piston.

In some engines it is desirable to elevate the shank 87 automatically rather than manually. In "variable quantity" engines alternate strokes of the engine piston produce varying degrees of compression. In such case regularity of movement of the armature piston 45 is insured by the continuous vibration of the shank 87. I prefer for this purpose a device like that shown in Fig. 10 comprising interspaced pins 94 and 96 which loosely engage therebetween the shank 87 which is vibrated by the rod 7. The sleeve 91 is adjustable upon the valve operating rod 7 by the screw 93, but in some instances a preferable adjusting means is that shown in Fig. 11, where this means consists of thumb nuts 98 and 99 threaded to the rod 7 above and below the sleeve 91 whereby the sleeve may be adjusted while the engine is operating.

What I claim is,—

1. In an electric sparking ignition mechanism, the combination with an engine cylinder and an ignition circuit, of an electric generator comprising an armature shaft in the circuit, and a bearing in which the armature is mounted, means actuated by the charge in the cylinder for imparting a generating throw to the armature shaft, and a spring mounted upon the bearing and en-

ing the armature shaft for returning the armature shaft to original position.

In an electric sparking ignition mechanism, the combination with an engine cylinder and an ignition circuit, of an electric generator comprising an armature shaft in the circuit, and a bearing in which the armature is mounted, means actuated by the charge in the cylinder for imparting a generating throw to the armature shaft, a spring mounted on the bearing and engaging the shaft, and means for varying the tension of the spring.

In an electric sparking ignition mechanism, the combination with an engine cylinder and an ignition circuit, of an electric generator comprising an armature shaft in the circuit, and a bearing in which the armature is mounted, means actuated by the charge in the cylinder for imparting a generating throw to the armature shaft, a rotatably adjustable member mounted upon the bearing, and a spring upon the bearing engaging both the shaft and the adjustable member.

In an electric sparking ignition mechanism, the combination with an engine cylinder and an ignition circuit, of an electric generator comprising an armature shaft in the circuit, and a bearing in which the armature is mounted, means actuated by the charge in the cylinder for imparting a generating throw to the armature shaft, a rotatably adjustable member mounted upon the bearing, a spring upon the bearing engaging both the shaft and the adjustable member, and means upon the adjustable member for maintaining said member in adjustable position.

In an electric sparking ignition mechanism, the combination with an engine cylinder, and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, driving connections between the piston and armature shaft, and means upon the generator for engaging the armature shaft for returning the piston to original position after each stroke.

In an electric sparking ignition mechanism, the combination with an engine cylinder, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the piston chamber, a fixed electrode in the plug, an axially movable electrode mounted in the plug, an arm on the second electrode normally in contact with the first electrode, a projection upon the second electrode, a lever provided with two arms pivotally mounted upon the plug, one of the lever arms extending normally in the path of the piston, and the other lever arm engaging the projection upon the electrode.

In an electric sparking ignition mechanism,

the combination with an engine cylinder, and a generator having an armature shaft and bearing, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, a crank upon the armature shaft, a rod connecting the piston and crank, a lug upon the crank, and a block upon the bearing in the path of the lug.

In an electric sparking ignition mechanism, the combination with an engine cylinder, and a generator having an armature shaft and bearing, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, a crank upon the armature shaft, a rod connecting the piston and crank, and a spring fixed to the bearing and extending into the path of the crank.

In an electric sparking ignition mechanism, the combination with an engine cylinder, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, an axially movable electrode mounted in the plug, a piston in the piston chamber, means for driving the piston, means actuated by the piston for rotating the electrode, and means in the plug for locking the piston against movement.

In an electric sparking ignition mechanism, the combination with an engine cylinder, an ignition circuit, and an electric generator having an armature shaft, of a piston operatively connected with the generator armature shaft and actuated by the charge in the cylinder, and means for locking the piston against movement.

In an electric sparking ignition mechanism, the combination with the engine cylinder, the generator, the armature shaft, and the ignition circuit, of a spark plug mounted in the cylinder and provided with a piston chamber communicating with the cylinder, a piston in the chamber, driving connections between the piston and the armature shaft, a swinging locking member mounted in the plug and movable into the path of the piston and means for actuating the locking member.

In an electric sparking ignition mechanism, the combination with the engine cylinder, of a spark plug mounted in the cylinder and provided with a piston chamber communicating with the cylinder, and provided with a transverse slot opening into the piston chamber, a piston in the piston chamber adapted to be actuated by a compressed charge in the cylinder, and a piston locking member pivotally mounted in the plug comprising a broad head located in the slot, and a shank upon the head extending outside the plug.

In an electric sparking ignition mechanism, the combination with the engine cylinder, the valve connecting rod, the genera-

H. J. PODLEŠÁK & T. E. PODLESAK.
INDUCTOR GENERATOR FOR IGNITION PURPOSES.

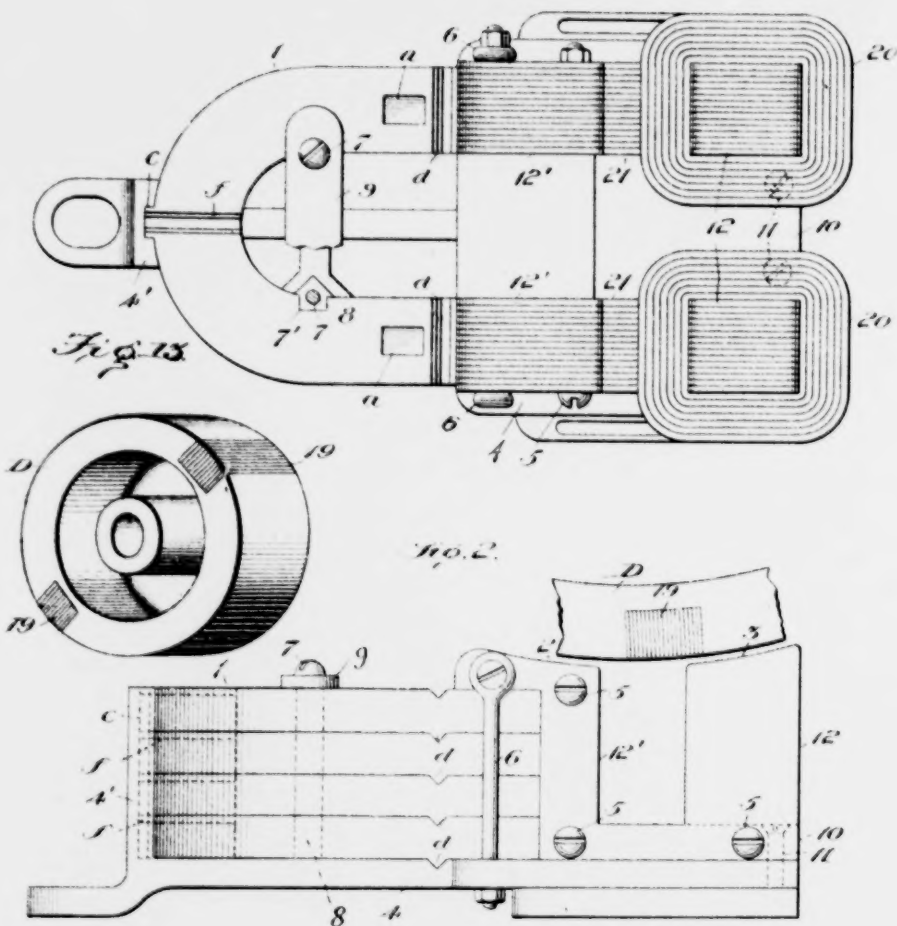
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1,003,649.

Patented Sept. 19, 1911

2 SHEETS-SHEET 1

No. 1.



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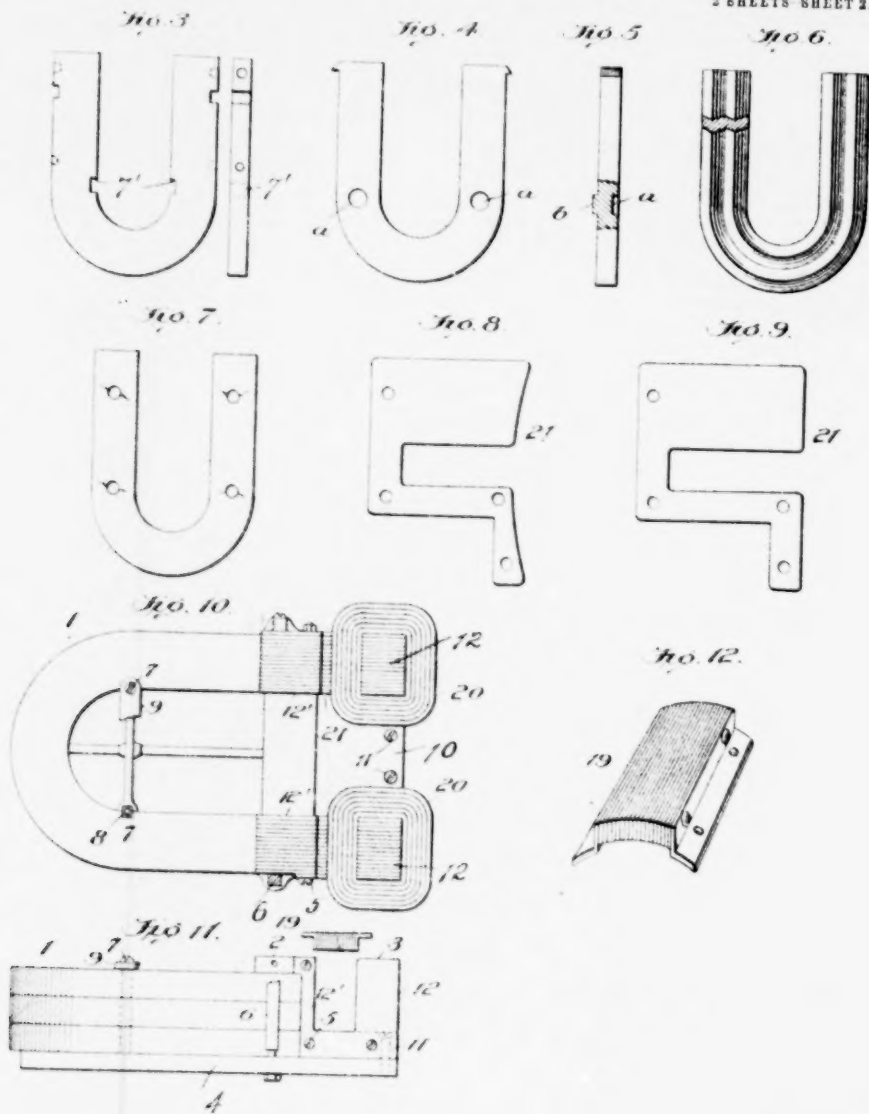
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2 SHEETS-SHEET 2.



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INDUCTOR-GENERATOR FOR IGNITION PURPOSES.

1,003,649.

Specification of Letters Patent.

Patented Sept. 19, 1911.

Original application filed September 25, 1901, Serial No. 76,559, Divided and this application filed January 28, 1908. Serial No. 413,068.

To all whom it may concern:

Be it known that we, HENRY JOSEPH PODLEŠÁK and TESLA EMIL PODLESAK, residing at Chicago, in the county of Cook, State of Illinois, and Morristown, county of Morris, State of New Jersey, respectively, have invented certain new and useful Improvements in Inductor-Generators for Ignition Purposes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to inductor alternators for ignition purposes.

It essentially pertains to inductor alternators capable of producing electrical effects suitable for the ignition of combustible charges in internal combustion motors.

It is for a division of the subject matter shown and disclosed in our application for Letters Patent, Serial No. 76,559, filed September 25, 1901.

One of the objects of our invention is to suitably support and position the permanent magnets, employed to establish the magnetic field, without the necessity of drilling holes in them, or otherwise disarranging the molecules of the magnet metal so as to diminish the magneto-motive force of which the magnets are capable and to establish consequent poles within the magnets themselves.

Another object of our invention is to so arrange and correlate the permanent field magnets to the other elements of an inductor alternator, that in operation the permanent magnets will be kept magnetized and built up.

Still another object of our invention is to provide an inductor alternator which is readily adaptable to all classes of internal combustion motors, such as automobile, marine, and stationary motors, and to the special requirements of each class, and is readily adjustable for varying the period of generation of maximum electro-motive force relative to the position of a piston within an engine cylinder.

Figure 1 is a plan view of the relatively stationary part of an inductor alternator embodying our invention. Fig. 2 is a side elevation of the inductor alternator shown in Fig. 1. Fig. 3 is an edge elevation and side elevation showing one manner of con-

structing the permanent magnets. Fig. 4 is a side elevation of still another construction of permanent magnets. Fig. 5 is a view partly in edge elevation and partly in section of the magnet shown in Fig. 5. Fig. 6 is a plan view of a permanent magnet having a corrugated surface. Fig. 7 is a plan view diagrammatically illustrating results which occur when holes are drilled in the magnets. Fig. 8 is a side elevation of one form of sheet metal punching or lamina of which the pole pieces of one of the inductor alternators hereinafter described, are made. Fig. 9 is a side elevation of another shape of pole piece punching or lamina. Fig. 10 is a plan view of the normally stationary part of a modified form of an inductor alternator embodying our invention. Fig. 11 is a side elevation of the inductor alternator shown in Fig. 10. Fig. 12 is a perspective view of one style of inductor employed by us in carrying out our invention. Fig. 13 is a perspective view of an inductor-carrying disk with inductors embedded in it.

In the drawings—1 indicates a permanent magnet preferably horseshoe or U-shaped in form. It is composed of as many magnet sections, arranged in a series, as may be required to establish the desired density of magnetic field.

2 is a frame, preferably of non-magnetic material, and employed to position and support in proper relation to each other the normally stationary parts of our inductor alternator.

3 is a clamp piece or cleat arranged to bear against the outermost magnet section in the series, and 4 are bolts or screws extending through said cleat and into the frame 2, and adapted to bind or clamp the said frame and permanent magnet 1 together. In order to prevent displacement of the magnet sections in the series, relative to each other and to the said frame 2, we have devised several ways of suitably shaping or forming and securing them. In Figs. 1, 2 and 3 are shown U-shaped magnet sections having their edges suitably notched or recessed at 5 to receive the bolts 4 which clamp the series of magnet sections to the frame 2. Some easily fusible metal, as indicated at 6, may be cast around the bolts 4

and between them and the walls of the recesses in which they are inserted, and the entire structure thus made a rigid one. To further facilitate in the rigidity of the construction as an entirety, and to prevent the relative lateral movement of the magnet sections, these sections may be punched, as shown in Figs. 4 and 5, so as to form depressions *a* on one side of the magnet, and corresponding projections *b* on the other. When the magnet sections are thus formed, the projections *b* on one magnet section register with and enter the corresponding depressions *a* in the next adjacent magnet section of the series. The depressions on one face of the magnet and the corresponding projections on the other may be of any desired shape and form. In Figs. 1 and 2, we have shown V-shaped depressions and corresponding projections *d*, and trough-shaped projections *f*. Both surfaces of the magnet sections may, if desired, be corrugated, as indicated in Fig. 6, to accomplish the same results of preventing the relative displacement of any of the magnet sections of the frame 4.

In Figs. 1 and 2 we have shown a frame 4 having an upward extension 4' suitably recessed to receive projections or lugs *e* on the yokes or toes of the magnet sections. In this case, as before described, the parts of the frame need not be accurately machined, as a readily fusible metal may be employed to fill up any cavity which may exist between the walls of the registering parts, and thus prevent relative movement of the said parts.

It will be clearly seen that many combinations of the several methods above referred to of securing the magnets immovably to the frame are possible, the exact arrangement being determined by the particular case in hand.

21 are pole pieces composed of a suitable number of punchings or laminae shown in Figs. 8 and 9. A pair of these pole pieces is preferably used, assembled, one at either side of a suitable center piece or spacing piece 10 of non-magnetic material, and suitably bolted together by means of bolts 5. This non-magnetic spacing piece 10 is suitably secured to the frame 4 by means of screws 11 and bolts 6, so as to hold the laminated pole pieces 21 in close magnetic contact with the ends or poles of the permanent magnets. Each one of the pole pieces has a pair of polar projections 12, 12', the former of which serves as a coil core upon which a winding or coil 20 of insulated wire is slipped, and to which the said coil is suitably secured. The coil core 12, on each pole piece, is spaced by a suitable air gap from the adjacent polar projection 12' on said pole piece. The outer faces or polar faces of the said polar projections 12, 12',

are suitably shaped to conform to the path of travel of a suitable inductor, herein after described. The polar faces on the polar projections 12' are designated by 2, and hereinafter referred to as exciting polar faces, and the polar faces on the polar projections 12 are designated by 3, and hereinafter referred to as generating polar faces.

19 is an inductor, preferably formed of punchings or laminae of suitable metal. This inductor is adapted to be rotated so as to have one of its faces pass over and closely adjacent to the exciting polar faces 2 and the generating polar faces 3, or in other words, as close to said polar faces as mechanical conditions will permit. The inductor 19 may be caused to cross over or pass over the exciting polar faces and then the generating polar faces in any desired manner. In Fig. 2 we have shown the exciting and generating polar faces on the pole pieces, and the face of the inductor 19 which travels closely adjacent to them, shaped to conform to the arc of a circle about the axis of which the inductor is rotatable. Normally the lines of magnetic force emanate in a scattered way, from all sides of the magnet for about one-half of its length from its free ends, and some of these lines of force emanate from the pole pieces. The inductor 19, in operation, first spans the exciting polar faces 2 and causes the concentration of a dense flow of magnetic lines of force, i. e., a substantial magnetic short circuit between the polar projections 12' of the laminated pole pieces. The inductor then moves across the air gap between the exciting polar faces and the generating polar faces and causes a rapid and substantially complete diversion of the magnetic flux density, first concentrated across the exciting polar faces, into and through the coil cores 12 and across the generating polar faces, so as to establish a substantial magnetic short circuit across the generating polar faces. The inductor then leaves the generating polar faces and the magnetic flux density through the induction windings is rapidly diminished, due to the fact that the lines of magnetic force instantly seek the path of least reluctance between the magnet poles.

With an inductor alternator constructed in accordance with our invention, the inductor does not at any time move sufficiently close to the limbs of the magnets themselves to draw or concentrate a dense magnetic flux across the limbs of the magnets above the poles thereof, but on the contrary, we have so constructed and arranged the elements of an inductor alternator for ignition purposes, that the inductor in its operation tends only to draw or concentrate the magnetic flux emanating from the magnet poles at

the free ends of said magnet, thereby tending to prevent the shifting of the said poles and to overcome the tendency of the said poles to shift, with the consequent loss of magneto-motive force by the magnets.

The electro-motive force is generated in the inductive windings 20, as in all dynamo-electric generators, by varying the magnetic flux density through the said windings. The inductor 19 operates to cause a very rapid varying of the magnetic flux density by first establishing a substantial magnetic short circuit, *i. e.*, by concentrating the magnetic flux at a point adjacent to but outside of the induction windings so that the magnetic flux density in the cores of said windings is practically zero, then quickly diverting the magnetic flux through the coil cores, and then, practically instantly, permitting the magnetic flux density in said coil cores to again drop to substantially zero.

D is a disk for carrying an inductor or inductors 19, as many inductors being employed as are requisite to cause the generation of electro-motive force at the different intervals required. With multi-cylinder motors, two or more inductors are used, there being one inductor for each cylinder, as will readily be understood, unless the periods of ignition of two or more of said cylinders occur at the same period of the stroke at alternate revolutions. In any case, an inductor must be provided and so arranged that it will pass over and span the generating polar faces when the ignition of a combustible charge is required. When desired, for the sake of appearance or greater safety, the inductor or inductors 19 may be embedded or inserted in a carrying disk or element of non-magnetic material.

The advantages of securing the sections of the permanent magnet together and to the frame in accordance with our invention, are many. It is well known that where the magnets or magnet sections are drilled, for the purpose of connecting them to a frame by means of bolts or screws passed through holes, the metal is liable to crack around the holes, as illustrated in Fig. 7, when it is tempered or hardened. This cracking materially diminishes the efficiency of the magnet, and sometimes destroys it entirely.

Where the inductors 19 are embedded in the wheel or disk D of non-magnetic material, carrying them, as shown in Fig. 13, when one of the inductors passes over or spans the polar faces of the polar extensions on the pole pieces opposite each other, it establishes a path of low magnetic reluctance for the magnetic flux emanating from the magnet. The section of non-magnetic material which next passes over the said polar faces is of such relatively high reluctance, that it will divert the magnetic flux from the polar projections in which it

has been concentrated by the inductor section preceding the said section of non-magnetic material.

What we claim is:—

1. In an inductor-generator for ignition purposes, the combination of a permanent magnet composed of sections, each section being provided with projections and depressions arranged to register with corresponding depressions and projections, respectively, on the sections adjacent to it, a pair of laminated pole-pieces, each in magnetic contact with the poles of said magnet and each pole-piece provided with two polar projections, each of which terminates in curved polar faces, two coils of wire, each wound in inductive relation to one projection of each of said pole-pieces, a frame of non-magnetic material, means for holding and fastening said pole-pieces to said frame and in suitable relation to each other, devices for holding said magnet in magnetic contact with said pole-pieces and to said frame, an unwound movable inductor arranged to concentrate by its movements the magnetic flux first through the unwound polar projections and then through the wound polar projections of said pole-pieces.

2. In an inductor generator for ignition purposes, the combination of a suitable frame of non-magnetic material, a permanent magnet built up in sections, each section having recesses to receive parts of the connecting means between the magnet and the said frame, and having depressions and projections arranged to register with corresponding projections and depressions, respectively, on the sections adjacent to it, means for clamping the permanent magnet to the frame, including bolts arranged to enter the recesses in said magnet sections, laminated pole pieces secured to said frame and each in magnetic contact with one of the poles of said magnet, induction windings in inductive relation to said pole pieces, and an unwound inductor movable relative to said pole pieces to vary the magnetic flux density in said induction windings.

3. In an inductor-generator for ignition purposes, the combination of a permanent field-magnet, a pair of laminated pole-pieces in magnetic contact with the poles of said magnet and having each a pair of polar projections, a non-magnetic support directly in contact with said pole-pieces, a winding surrounding one of the polar projections on each of said pole-pieces, the other polar projection on each pole-piece being unwound, connections between said pole-pieces and said support for rigidly clamping the pole-pieces to said magnet and to said support, an inductor movable to periodically vary the magnetic flux through said windings, and a rotatable member of non-magnetic material in which said inductor is embedded.

4. In an inductor-generator for ignition purposes, the combination of a permanent magnet composed of sections, each section having depressions and projections arranged to register with corresponding projections and depressions, respectively, on the sections adjacent to it, whereby relative displacement of the sections is prevented, a suitable frame of non-magnetic material, means for clamping the permanent magnet to the frame, laminated pole-pieces in magnetic contact with the poles of said magnet, connections between said pole-pieces and said frame for rigidly clamping the pole-pieces to the frame, said connections passing outside of the permanent magnet to avoid perforating the same, a winding on said pole-pieces, and an inductor movable in proximity to said pole-pieces to vary the magnetic flux through said winding.

5. In an inductor generator for ignition purposes, the combination of a permanent magnet, a pair of laminated pole pieces, each held in magnetic contact with one of the poles of said magnet, extending laterally therefrom and having a plurality of polar projections with curved polar faces disposed at one side of the plane of the magnet and relatively remote from the poles of said magnet, two coils of wire, each in inductive relation to one polar projection on each pole piece, means formed of non-magnetic material connecting the said pole pieces together and holding them suitably spaced apart and in contact with the poles of said magnet, and an unwound inductor movable relative to the polar faces of said polar projections, and adapted to concentrate the magnetic flux emanating from the poles of said magnet only between said pole pieces, and alternately across the polar faces of the unwound and then the wound polar projections on said pole pieces.

6. In an inductor-generator for ignition purposes, the combination of a suitable frame of non-magnetic material, a permanent magnet composed of sections provided with recesses, each section having depressions and projections arranged to register with corresponding projections and depressions on the sections adjacent to it, means arranged to enter the recesses in said sections for clamping the permanent magnet to the frame, laminated pole-pieces secured to said frame and each in magnetic contact with one of the poles of said magnet, a winding on said pole-pieces, and an inductor movable in proximity to said pole-pieces to vary the magnetic flux through said winding.

7. In an inductor-generator for ignition purposes, the combination of a permanent magnet composed of a plurality of sections provided with recesses, a frame of non-magnetic material, means for clamping said frame and magnet together, said clamping

means including members fitted to enter said recesses, a filling of readily fusible metal between said members and the walls of the recesses for holding the members firmly in place, a pair of pole-pieces secured to said frame and each held in magnetic contact with one of the poles of said magnet, a pair of polar projections provided on each pole-piece, a winding on one of said polar projections, and an inductor movable in proximity to said polar projections to vary the magnetic flux through said winding.

8. In an inductor-generator for ignition purposes, the combination of a frame of non-magnetic material, a pair of pole-pieces secured to said frame and each provided with two polar projections, a winding arranged on one of said pole-pieces, a permanent field magnet composed of sections and having its poles in magnetic contact with said pole-pieces, connecting devices for holding said magnet to said frame, the sections of said magnet being suitably recessed to receive parts of said connecting devices, and a movable inductor arranged to concentrate the magnetic flux alternately through one pair and then through the other pair of polar projections to vary the magnetic flux through said winding.

9. In a magnetic field structure, the combination of a permanent magnet, a pair of pole-pieces therefor, a non-magnetic support having a flat engaging surface directly in contact with said pole-pieces and said magnet, and connections between said pole-pieces and said support for rigidly clamping the pole-pieces to said magnet and to said support.

10. In a magnetic field structure, the combination of a permanent magnet of horse shoe shape, a pair of pole-pieces provided with extensions adapted to rest upon the face of said magnet, a non-magnetic support directly in contact with said pole-pieces, and connecting members secured to said extensions and to said support for rigidly clamping the pole-pieces to said magnet and to said support.

11. In a magnetic field structure, the combination of a permanent magnet provided with recesses, a non-magnetic support for said magnet, a fastening device including bolts arranged to enter said recesses for clamping the magnet to the frame, and a filling metal cast around the bolts in said recesses whereby the magnet and the fastening device are rigidly connected together.

12. In an inductor-generator for ignition purposes, the combination of a suitable support of non-magnetic material, a permanent magnet composed of sections provided with recesses, laminated pole-pieces secured to said support and in magnetic contact with the poles of said magnet, means arranged to enter said recesses for clamping and hold

ing the magnet to the support independently of the pole-pieces, said pole-pieces being provided with a winding, and an inductor movable in proximity to said pole-pieces to vary the magnetic flux through the winding.

13. In an inductor-generator for ignition purposes, the combination of a suitable frame of non-magnetic material, a permanent magnet composed of sections, each section having depressions and projections arranged to register with corresponding projections and depressions on the sections adjacent to it, means for clamping said magnet to the frame, laminated pole-pieces in magnetic contact with the poles of said magnet, a winding on one of said pole-pieces, and an inductor movable in proximity to said pole-pieces to vary the magnetic flux through said winding.

14. In an inductor generator for ignition purposes, the combination of a frame of non-magnetic material, a pair of pole-pieces secured to said frame and each provided with two polar projections, two coils of wire, one in inductive relation to one of said projections on each pole-piece, a permanent field magnet composed of sections and having its poles in magnetic contact with each said pole-piece, connecting devices for holding said magnet in magnetic contact with said pole-pieces, the sections of said magnet being suitably recessed to receive parts of said connecting devices, and a movable inductor arranged to concentrate the magnetic flux

alternately through one pair and then through the other pair of polar projections to vary the magnetic flux through said coils of wire. 35

15. In an inductor generator for ignition purposes, the combination of a frame of non-magnetic material, a pole-piece secured to said frame and provided with two polar projections, a coil of wire in inductive relation to one of said projections, a permanent field magnet composed of sections and having its poles in magnetic contact with said pole-piece, connecting devices for holding said magnet in magnetic contact with said pole-piece, the sections of said magnet being suitably recessed to receive parts of said connecting devices, and a movable inductor arranged to concentrate the magnetic flux alternately through one and then through the other of the polar projections to vary the magnetic flux through said coil of wire. 40 45 50 55

In witness whereof we affix our signatures, in the presence of two witnesses.

HENRY JOSEPH PODLEŠÁK.
TESLA EMIL PODLESÁK.

Witnesses to the signature of Henry Joseph Podlešák:

Y. TOMÁŠEK,
F. PTÁČEK.

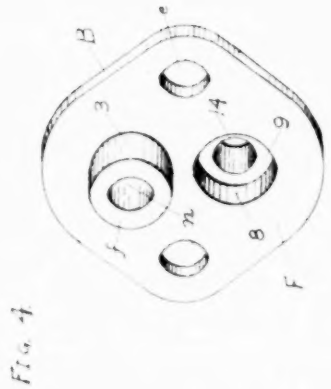
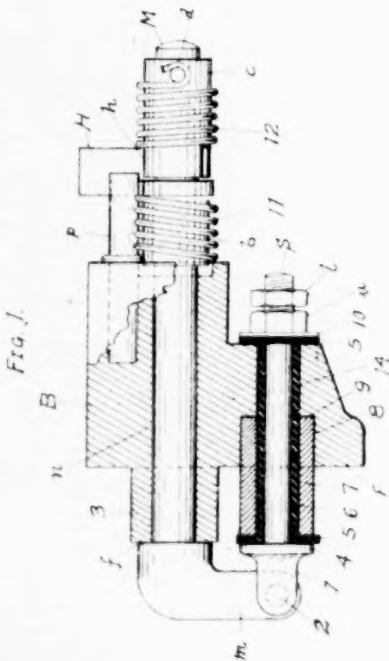
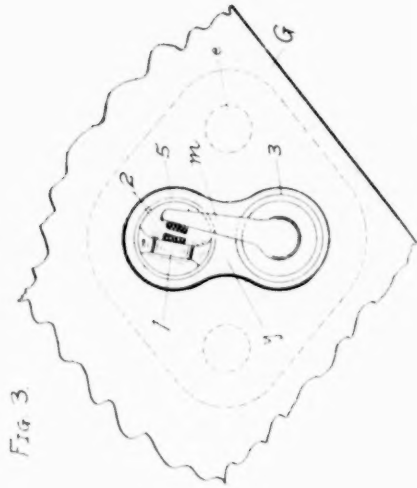
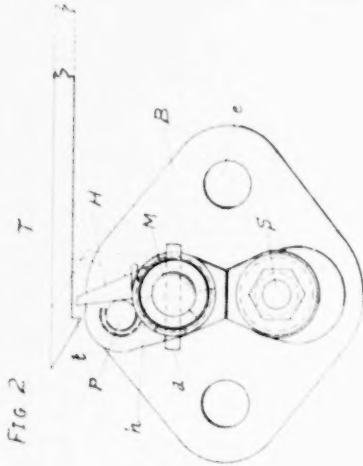
Witnesses to the signature of Tesla Emil Podlesak:

LILLIAN B. SHERMAN,
JOHN H. BONSALL.

LOW TENSION SPARKING MECHANISM FOR GAS ENGINES.

1,022,642.

Patented Apr. 9, 1912.



James A. Tollar
J. Lobek

Henry J. Podlesian

UNITED STATES PATENT OFFICE.

HENRY J. PODLEŠÁK, OF CHICAGO, ILLINOIS.

LOW-TENSION SPARKING MECHANISM FOR GAS-ENGINES.

1,022,642.

Specification of Letters Patent.

Patented Apr. 9, 1912.

Application filed February 17, 1909. Serial No. 478,355.

To all whom it may concern:

Be it known that I, HENRY J. PODLEŠÁK, a citizen of the United States, residing in Chicago, county of Cook, and State of Illinois, have invented new and useful Improvements in Low-Tension Sparking Mechanism for Gas-Engines, of which the following is a clear, full, and exact description.

The object of the present invention, broadly speaking, is to provide an improved construction of said sparking mechanism, possessing maximum mechanical efficiency, requiring small space and a small port through which the electrodes are introduced into the combustion chamber, and so designed as to reduce the cost of manufacture to a minimum.

Other objects and advantages of this invention will appear in the following specification and the accompanying drawings, in which:

Figure 1 is an elevation, partly sectional; Fig. 2 is a side elevation, showing the electrode actuating mechanism; Fig. 3 is another side elevation, showing the sparking or contact members and the port through which the electrodes are introduced into the combustion chamber; Fig. 4 is a perspective, showing the packing face of the body or frame.

B is a body or frame, carrying the various parts; F is a machined face between which and a similar face on the combustion chamber packing is placed to secure an air tight joint; 3 is a round lug secured to B, preferably made integral with it, and extending laterally from the face F, forms an extension of the bearing *a*, for the movable electrode M, which is shouldered at *f*, a seat face on extremity of lug 3; *m* is an arm integral with the electrode M, disposed at right angles thereto and carrying a contact member, or point, 2, which is arranged suitably to make contact with a similar contact member on the head 1 of the stationary, insulated electrode, or bolt, S.

8 is a round counterbore, extending from face F into the body B and terminates in a seat face 9; 14 is a round perforation through the body B, coaxial with the counterbore 8; 7 is a sleeve inserted into the counterbore 8, seating on seat 9 thereof, and extending laterally from the face F. The perforation in this sleeve 7 is coaxial with the perforation 14, and preferably of same

size, so as to readily receive a bushing 6, which should be made of some non-combustible insulating material.

Insulating washers 5, are placed at each end of the insulating tube 6, thus affording complete insulation of the bolt S from the body B.

u is a nut by means of which the bolt S, the sleeve 7, tube 6, and washers 5, are all secured together and to the frame B; 10 is a metal washer protecting the washer 5, beneath it, from the nut *u*; the nut *l* is for securing the circuit wire to S.

The sleeve 7 may be secured into frame by threading it into the counterbore 8. However, the construction shown is obviously the least expensive, in manufacture. By using some non-combustible packing, such as asbestos, between the seat 9 and the sleeve 7, the seat faces on these need not be ground in to secure an air tight joint thereat.

The sleeve *b* is loosely mounted on M and is provided with a striker arm H, which normally engages a projection *h* of a sleeve *c*, this latter being pinned fast to electrode M by pin *d*; the torsion spring 11, coiled around sleeve *b*, has one of its ends engaged on pin *p* and the other on the striker arm H, the spring acting to normally hold said striker arm H bearing on the pin *p*, which pin serves as a stop for the striker arm H; the torsion spring 12, coiled around sleeve *c*, has one of its ends engaged on the striker arm H and the other end on a pin *d*, the spring acting to normally hold the projection *h*, of sleeve *c*, in contact with the striker arm H. The movable electrode M is pinned to the sleeve *c* in such relation that the contact points 2 are separated about one-sixteenth of an inch when the striker arm H and the sleeve *c* are in normal position, that is, arm H bearing against pin *p* and the projection *h* in contact with arm H.

The trip rod, or bar, T is so connected to some moving part of the engine that a reciprocating movement is imparted to it, in operation, at such period that the lip *t*, of this trip rod T, will actuate the striker arm H so that the contact points are brought together and then separated at the proper period for ignition. It will be apparent that as the trip rod T is moved to the right, Fig. 2, the lip *t* will engage the striker arm H, moving it to the right, turning the sleeve *b* clockwise; the movable electrode M. re-

silently connected to the arm II, will be rotated clockwise until the two contact points 2 come together, then, as the arm II is moved farther, this arm II will be disengaged from the projection *h* of the sleeve *c* which is pinned fast to the electrode *M*. When the arm II has been moved to some such position as shown by the dotted lines, the lip *t* will trip off, or disengage the arm II, when this will be impelled back by the two springs 11 and 12, and strike a hammer-like blow to the projection *h*, thus making a practically instantaneous break in the current that may be flowing through the contact points 2, the spark resulting from this quick break being a most efficient one for igniting the combustible charges compressed in the combustion chamber of a gas engine.

It is well known that in the manufacture of igniter mechanism, of the class herein described, much difficulty is experienced in machining the frame or body so as to secure efficient packing surfaces, seat surfaces for the movable electrode, etc., it being necessary, in the constructions now in use, to resort to numerous and expensive machining operations to obtain good results. This is especially true in such cases where the port through which these parts of the body, or frame, carrying the electrodes, and the electrodes themselves are introduced into the combustion chamber, must be made small, because of the small combustion chamber necessary to obtain the proper compression in small engines and further the high compression necessary in all sizes of engines when alcohol is to be employed as the fuel. The igniter mechanism can, in such cases, be made smaller in size, but then its component parts become too small to be durable, are easily broken, hence expensive in maintenance, and expensive to make. By employing my construction, it is possible to utilize electrodes, and hence other parts as well, of a substantial size, and yet have the port through which the electrodes are inserted into the combustion chamber of relatively small size.

As will be apparent, the body *B* can be properly machined at very low cost by employing a chucking turret lathe, provided with a suitable chuck which will grasp the body, in the rough, so that the center line for bearing *n* coincides with center line of the lathe spindle; suitable tools are carried in the turret and in the cross slides to face the packing face *F*; the seat face *f*, to turn the lug 3, to bore and ream the bearing *n*, and to slightly groove or serrate the face *F*, all these operations in one setting. The remaining operations are simple and cheap.

I prefer not to thread the sleeve 7 into the body *B*, but to hold it in by the electrode, or bolt, *S*, as shown in Fig. 1, and

using asbestos packing between the sleeve and the seat 9; this not only makes an tight joint, at low cost, but also affords a flexible or resilient joint upon which the expansion and contraction of the electrode due to heating and cooling, is taken up, instead of being taken up upon the washers which are preferably of mica; the life of these washers is much prolonged and the efficiency is much increased by this, as they are kept tight at all times, whether the igniter is hot or cold. It is not necessary to insulate the sleeve 7, though this can be done.

I have described and shown the preferred form of the construction in my invention.

I claim:

1. In sparking mechanism for gas engines, the combination of a frame having a packing face and a lug extending laterally from said face and terminating in a seat face, a cylindrical perforation through the lug and the frame and substantially at right angles to the packing face, a shoulder on a rock shaft in said perforation, a counterbore in the frame at a distance from the lug and extending inwardly from the packing face a second perforation through the frame co-axial with and of smaller diameter than the counterbore, a cylindrical sleeve inserted into the counterbore and extending beyond the packing face and having its perforation of substantially same size as and co-axial with the said second perforation, an insulating sleeve extending through the perforation of said sleeve and through said seat perforation, insulating washers at each end of the insulating sleeve, a bolt passing through said washers and the insulating sleeve and rigidly clamping said washers and said sleeves to the frame, a counter member on the end of the bolt extending from the cylindrical sleeve, an arm secured to the end of the rock shaft extending from the seat face, and a second contact member secured to said arm and adapted to make contact with the first said contact member.

2. In sparking mechanism for gas engines, the combination of a frame having a packing face and a lug extending laterally from the packing face and terminating in a seat face, a cylindrical perforation through the lug and the frame, a counterbore at a distance from the lug and extending from the packing face into the frame, a second perforation through the frame co-axial with and of smaller size than the counterbore, a sleeve extending into the counterbore and relatively longer than the depth of the counterbore, a bolt passing through the sleeve and said co-axial perforation and insulatably secured to the body, a movable shouldered shaft in said cylindrical perforation the shoulder of the shaft seating on the seat face on the lug, and an arm secured to the

shouldered end of the shaft extending laterally therefrom and adapted to make contact with the head of said bolt.

In sparking mechanism for gas engines, the combination of a frame having a packing face; a lug integral with said frame and extending laterally from and behind the packing face and terminating in a seat face, a perforation through the lug and through the frame, a shouldered shaft passing through said perforation and extending beyond the frame, the shoulder seating on said seat face, a sleeve provided with an arm loosely mounted on said shaft; a stop secured to the frame and adapted to engage said arm of said sleeve; a spring connected to said arm and the frame and adapted to normally hold said arm against said stop; a projection secured to said shaft and adapted to engage with said arm, a second spring adapted to normally hold the projection in engagement with said arm, means for actuating said arm, a second perforation through the frame at a distance from first perforation, a counterbore extending from said packing face into the frame and coaxial with and of larger diameter than said second perforation, a cylindrical sleeve within and longer than the depth of

the counterbore, a bolt passing through said sleeve and said second perforation and insulatably secured to the frame, and an arm rigidly secured to the shouldered end of said shaft and adapted to make contact with that end of the bolt projecting beyond said sleeve. 30 35

4. In sparking mechanism for gas engines, the combination of a frame having a packing face, a lug integral with the frame and extending laterally from said face and terminating in a seat face, a cylindrical perforation through the lug and the frame and at right angles to the seat face, a counterbore at a distance from the lug and extending from the packing face into the frame, a second perforation through the frame coaxial with and of relatively smaller size than the counterbore, and a perforated bushing extending and fitting into the counterbore and projecting beyond the packing face. 40 45 50

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

HENRY J. PODLEŠÁK.

Witnesses:

CARRIE E. JORDAN,

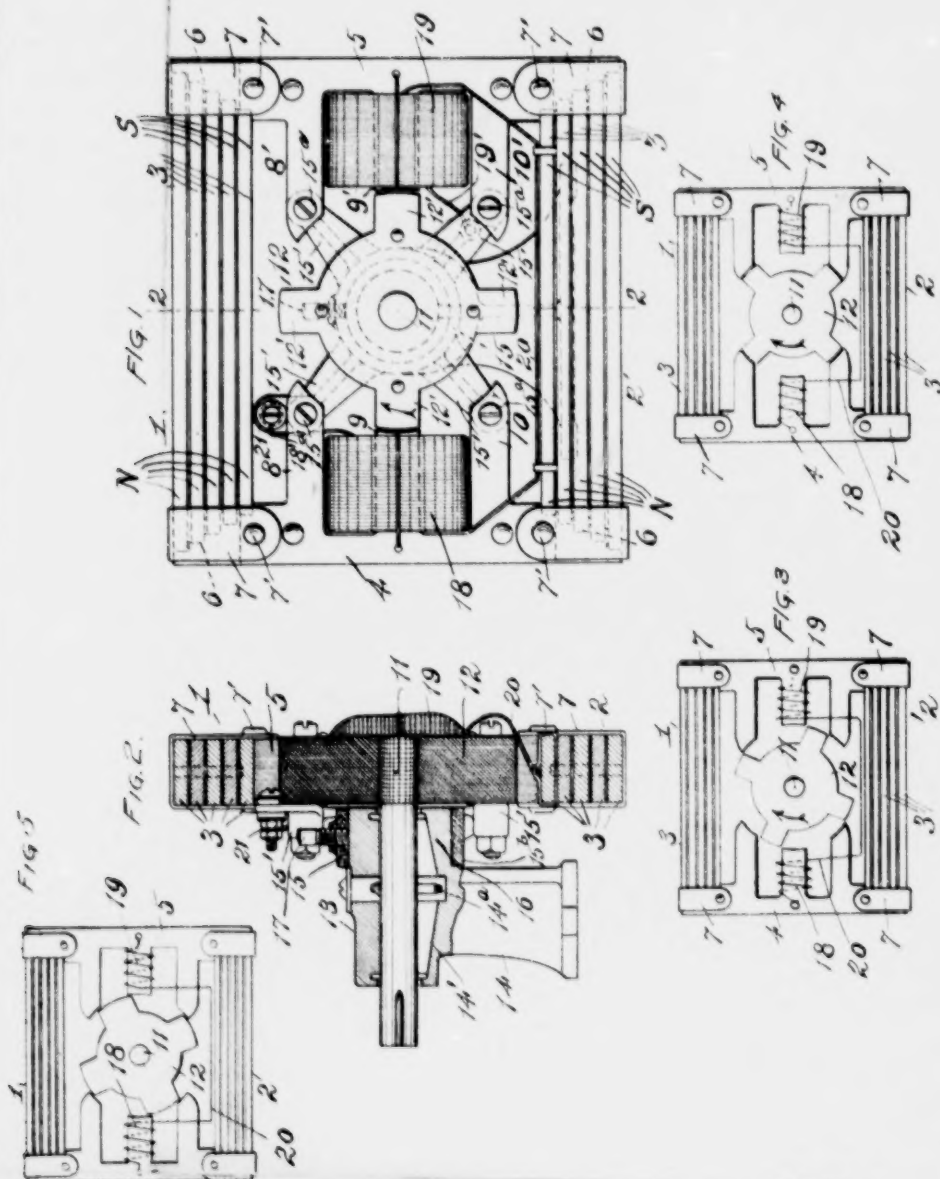
JENNIE L. FISKE.

A copy of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

J. L. MILTON.
INDUCTOR GENERATOR FOR IGNITION PURPOSES.
APPLICATION FILED JUNE 17, 1907.

1,051,373.

Patented Jan. 21, 1913



WITNESSES:

G. C. Wright

Philip H. Burch

INVENTOR

John L. Milton
BY *James H. Hancock*
ATTORNEY

UNITED STATES PATENT OFFICE.

JOHN L. MILTON, OF CHICAGO, ILLINOIS

INDUCTOR-GENERATOR FOR IGNITION PURPOSES.

1,051,373.

Specification of Letters Patent.

Patented Jan. 21, 1913.

Application filed June 17, 1907. Serial No. 379,455.

To all whom it may concern:

Be it known that I, JOHN L. MILTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Inductor-Generators for Ignition Purposes, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to improvements in inductor generators for ignition purposes. It is an improvement upon the apparatus for similar purposes set forth and described in my application Serial No. 357,041, filed February 12, 1907, for inductor generators.

Figure 1 is a front face view of an inductor generator embodying my improvements. Fig. 2 is a section on the line 2—2, Fig. 1. Fig. 3 is a diagrammatic view showing the inductor in another position than that shown in Fig. 1. Fig. 4 is a diagrammatic view showing the inductor in still another position. Fig. 5 is a diagrammatic view illustrating a modified type of inductor.

In the drawings 1, 2, indicate permanent field magnets, preferably arranged parallel to each other. These permanent field magnets may be of any suitable construction. I prefer, for the purpose of economy of cost and simplicity of construction, to make up each field magnet of a plurality or group of permanent straight bar magnets 3.

4, 5, represent pole pieces one interposed between the positive poles of said permanent magnets, and the other interposed between the negative poles of the permanent magnets. Preferably these pole pieces are made up of laminae of metal of high magnetic permeability and susceptibility, and form with the permanent magnets a substantially rectangular frame. For this purpose I have provided the same simple arrangement and correlation of the ends of the permanent magnets and the ends of the pole pieces, shown and described in my application for Letters Patent hereinbefore referred to, namely, the straight bar magnets forming each group of magnets increase in length from the innermost one outward, and are so arranged as to form a series of steps 6 at either end of each permanent field magnet. The end of each pole piece is stepped to correspond with the end of the permanent magnet adjacent to it.

7 are U-shaped clips, each fitted over the

end of a permanent field magnet and the end of a pole piece adjacent thereto, and secured to the pole piece in any suitable manner, as for example by a rivet 7'.

Each pole piece carries three inwardly turned polar projections, those on the pole piece 4 being indicated by 8, 9, and 10, respectively, and those on the pole piece 5 by 8', 9', and 10', respectively. Preferably, the laminae of which each pole piece is built up are suitably stamped out to form the polar projections carried by the pole pieces.

11 is an inductor shaft. 12 is an inductor suitably secured to said shaft and arranged to rotate between the polar projections on the opposite pole pieces. This inductor is preferably made up of laminae of metal of high magnetic permeability and shaped to form four radial extensions or projections 12' arranged 90 degrees apart about the axis of the shaft 12, in the form of a Maltese cross.

The polar faces of the polar projections carried by the pole pieces are each curved to the arc of a circle common to all, struck from the axis of the shaft 11 as a center, and the coöperating surfaces of the projections 12' on the inductor are correspondingly curved and arranged to operate as closely adjacent to the polar faces of the polar projections as mechanical conditions will permit.

The inductor shaft 11 may be supported in any suitable manner. For the purpose of illustration I have shown it mounted in a bearing 13 carried by a suitable bearing standard 14.

14' is a lubricant chamber in the standard 14, and 14^a is an oil ring surrounding the inductor shaft in said lubricant chamber.

15 is a supporting plate of non-magnetic material for the field magnet frame. It has four radially extending arms 15' arranged 90 degrees apart, and each one suitably secured at its outer end, as indicated at 15^a, to the end of the adjacent polar projection. 15^b is a hollow collar or bearing on said supporting plate snugly fitted to a boss 16 on the bearing standard 14 and angularly adjustable thereabout.

17 is a set screw carried by the collar 15^b and having its inner end arranged to engage the boss 16 to hold the plate 15 and field magnet frame in any desired position

of angular adjustment relative to the axis of the shaft 11.

18 is a coil of insulated wire surrounding the polar projection 9, which is the middle polar projection of the three carried by the pole piece 4. 19 is a coil of insulated wire surrounding the polar projection 9', the middle one of the three carried by the pole piece 5. These induction coils may be electrically connected together in any suitable manner. In the drawings, I have shown a conductor 20 connecting them in series.

21 is a binding post carried by one of the arms 15' of the support 15. The free end 18' of the coil of wire 18 is connected with this binding post. The free end 19' of the coil 19 may be connected with one terminal of the ignition system for an internal combustion motor in any suitable manner. The free end 18' of the coil 18 may be suitably connected to the other terminal of the said ignition system.

The magnetic fields set up by the two permanent field magnets oppose each other, the direction of the lines of force for each field magnet across the gap between the pole pieces 4, 5, being always the same. When the inductor 12 is in the position shown in Fig. 1, a substantial magnetic short circuit for the permanent magnets is established by the inductor across the diametrically opposite wire wound polar projections 9, 9', and the magnetic flux density through the induction coils 18, 19, is at its maximum. As the inductor is rotated in the direction indicated by the arrows in the figures, the magnetic flux density through the induction coils is more or less gradually diminished, in accordance with the speed of rotation of said inductor, until the diametrically opposite arms or projections 12', 12'', each of which has been moving closely adjacent to one of the polar faces on the wire wound polar projections 9, 9', leave the said polar projections and air gaps are established between the said wire wound polar projections and the inductor; then the magnetic flux density through the said induction coils is suddenly and rapidly diminished, this diminution of magnetic flux density being emphasized and accelerated by the inductor establishing substantial magnetic short circuits for the permanent magnets outside of said induction coils, namely, across the polar projections 8, 8', on one side of, and across the polar projections 10, 10', on the other side of said wire wound polar projections.

The inductor 12 and the polar faces on the polar projections carried by the pole pieces 4 and 5 are so shaped and correlated, that the inductor at all times establishes paths substantially equal in magnetic reluctance for both groups of permanent magnets at either side of it, as shown in Fig. 4.

In order to obtain a high peak to the electromotive force curve generated by the apparatus herein shown, I have found it desirable to so correlate the polar surfaces of the polar projections and the cooperating extensions on the inductor, that at the instant the diametrically opposite pair of extensions on the inductor leave the polar faces of the wire wound polar projections, air gaps are established between all of the polar projections on both pole pieces and the inductor, and that immediately thereafter the inductor establishes the substantial magnetic short circuits above referred to outside the wire wound polar projections. To accomplish this result, in the device herein shown and described, I have made the width of the radial projections 12' carried by the inductor less than the distance between the most closely adjacent points at either end of the polar face of each wire wound polar projection, and the polar face of the polar projection carried by the same pole piece adjacent to it, as shown in Fig. 3.

It will be noted that the polar projections and inductor are so correlated that the results obtained will be the same when the inductor is turned in either direction, clockwise, or anti-clockwise, so that the apparatus may be readily accommodated to a reversible motor. Furthermore, with this construction, the inductor may be oscillated, if desired, rather than rotated.

In Fig. 5 I have illustrated a modified type of inductor over that hereinbefore described, in that the radial extensions on this modified inductor are of sufficient width to close the magnetic circuit across the unwound polar projections before they leave the wire wound polar projections and establish air gaps between the latter and the inductor.

What I claim is:—

1. In an inductor-alternator, the combination of a magnetic field-structure, provided with a pair of oppositely disposed pole-pieces, three polar projections carried by each pole-piece, a winding on the middle polar projection of each pole-piece, the two polar projections at either side of the wound projection being unwound, and an inductor substantially in the shape of a Maltese cross, arranged to move in proximity to said polar projections to vary the distribution of the magnetic flux therethrough.

2. In an inductor-alternator, the combination of a magnetic field-structure provided with a pair of oppositely disposed pole-pieces, three polar projections carried by each pole piece, the polar faces of said projections being arranged in the arc of a common circle, a winding on the middle polar projection of each pole-piece, the two polar projections at either side of the wound projection being unwound, and an inductor hav-

ing four arms movable in proximity to said polar faces to vary the distribution of the magnetic flux therethrough, the width of said arms at their outer ends being less than the distance between adjacent polar faces.

3. In an inductor-alternator, the combination of a pair of oppositely disposed permanent bar-magnets, pole-pieces for connecting the poles of like polarity, three polar projections carried by each pole-piece, a winding on the middle polar projection of each pole-piece, the two polar projections at either side of the wound projection being unwound, and an inductor substantially in the shape of a Maltese cross arranged to vary the distribution of the magnetic flux through said polar projections, said inductor in one position establishing a substantial magnetic short-circuit across said wound polar projections, and in another position establishing a substantial magnetic short-circuit across said unwound polar projections.

4. In an inductor-alternator, the combination of a magnetic field-structure provided with a pair of oppositely disposed pole pieces, three polar projections carried by each pole piece, a winding on the middle polar projection of each pole-piece, the two polar projections at either side of the wound projection being unwound, a plate of non-magnetic material suitably connected to said unwound polar projections for supporting the field-magnet structure, and an inductor arranged to move in proximity to said polar projections to vary the distribution of the magnetic flux therethrough, said inductor in one position establishing a substantial magnetic short-circuit across said wound polar projections, and in another position establishing a substantial magnetic short-circuit across said unwound polar projections.

5. In an inductor-alternator, the combination of two oppositely disposed groups of permanent bar-magnets, pole-pieces for connecting the poles of like polarity, said pole-pieces being each recessed at either end to receive the adjacent end of one of the magnets, and a plurality of U-shaped clips arranged to straddle each one end of a pole-piece and the group of magnets in contact therewith, and means for suitably securing said clips to the pole pieces.

6. In an inductor-alternator, the combination of a pair of oppositely disposed permanent field-magnets, pole-pieces for connecting the poles of like polarity, three polar projections carried by one of said pole-pieces, a winding on the middle polar projection, the two polar projections at either side of the wound projection being unwound, and an inductor arranged to move in proximity to said polar projections to vary the distribution of the magnetic flux there-
through, said inductor in one position estab-

lishing a substantial magnetic short-circuit through said winding, and in another position establishing a substantial magnetic short-circuit across said unwound polar projections.

7. In an inductor-alternator, the combination of a magnetic field-structure provided with a pair of oppositely disposed pole-pieces, three polar projections carried by each pole-piece, windings on the middle polar projections, the other of said polar projections being unwound, and an inductor arranged to move in proximity to said polar projections to vary the distribution of the magnetic flux therethrough, said inductor in one position establishing a substantial magnetic short-circuit simultaneously through both windings, and in another position establishing a substantial magnetic short-circuit simultaneously through all four unwound polar projections.

8. In an inductor-alternator, the combination of a pair of oppositely disposed permanent field-magnets, pole-pieces for connecting the poles of like polarity, three polar projections carried by each pole-piece, windings on two of said polar projections, the other of said polar projections being unwound, and an inductor arranged to move in proximity to said polar projections to vary the distribution of the magnetic flux therethrough, said inductor in one position establishing a substantial magnetic short-circuit simultaneously through both windings, and in another position establishing a substantial magnetic short-circuit simultaneously through all four unwound polar projections.

9. In an inductor-alternator, the combination of a magnetic field-structure provided with a pair of oppositely disposed pole-pieces, three polar projections carried by each pole-piece, windings on some of said polar projections, the other of said polar projections being unwound, and an inductor having four radial arms movable in proximity to said polar projections, said arms serving in one position to establish a substantial magnetic short-circuit through said windings, and in another position to establish a substantial magnetic short-circuit across said unwound polar projections.

10. In an inductor-alternator, the combination of a magnetic field-structure provided with a pair of oppositely disposed pole pieces, three polar projections carried by each pole piece, an inductor having four radial arms movable in proximity to said polar projections, said arms serving in one position to establish a substantially magnetic short-circuit through four of said polar projections, and in another position to establish a substantially magnetic short-circuit through the two middle polar projections, and windings so arranged on said

polar projections that the magnetic variations therethrough occur simultaneously as the inductor is rotated.

11. In an inductor-alternator, the combination of a pair of oppositely disposed permanent straight-bar magnets, pole pieces connecting the poles of like polarity, three polar projections carried by each of said pole pieces, an inductor having four radial arms movable in proximity to said polar projections, said arms serving in one position to establish a substantially magnetic short-circuit through four of said polar projections, and in another position to establish a substantially magnetic short-circuit through the two middle polar projections, and windings so arranged on said polar projections that the magnetic variations therethrough occur simultaneously as the inductor is rotated.

12. In an inductor alternator, the combination of a pair of oppositely disposed permanent straight-bar magnets, pole pieces arranged between said magnets at right an-

gles thereto for connecting the poles of like polarity and forming with said magnets a substantially rectangular frame, said pole pieces and magnets lying in a single radial plane, three polar projections carried by each of said pole pieces, a winding on each middle polar projection, the two polar projections on each side of the wound polar projections being unwound, and an inductor having a plurality of radial arms arranged to move in proximity to said polar projections to vary the magnetic flux therethrough, said inductor in one position establishing a magnetic short-circuit through said wound polar projections and in another position establishing a magnetic short-circuit through said unwound polar projections.

In testimony whereof I affix my signature, in presence of two witnesses.

JNO. L. MILTON.

Witnesses:

T. K. WEBSTER,
HENRY J. PODLESAK.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

1,053,107.

Patented Feb. 11, 1913.

2 SHEETS-SHEET 1.

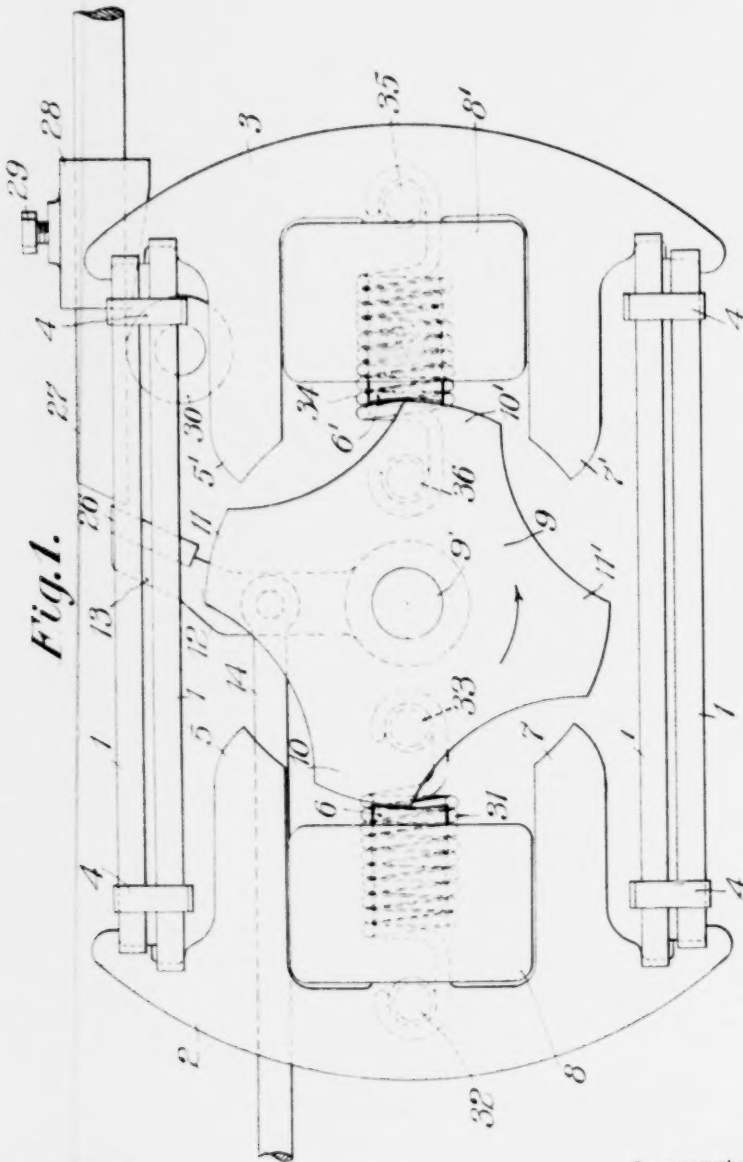


Fig. 1.

Witnesses

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Leonard W. Novander

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APPARATUS FOR GENERATING ALTERNATING CURRENTS.

APPLICATION FILED JAN. 30, 1909

1,053,107.

Patented Feb. 11, 1913.

2 SHEETS-SHEET 2

Fig. 2.

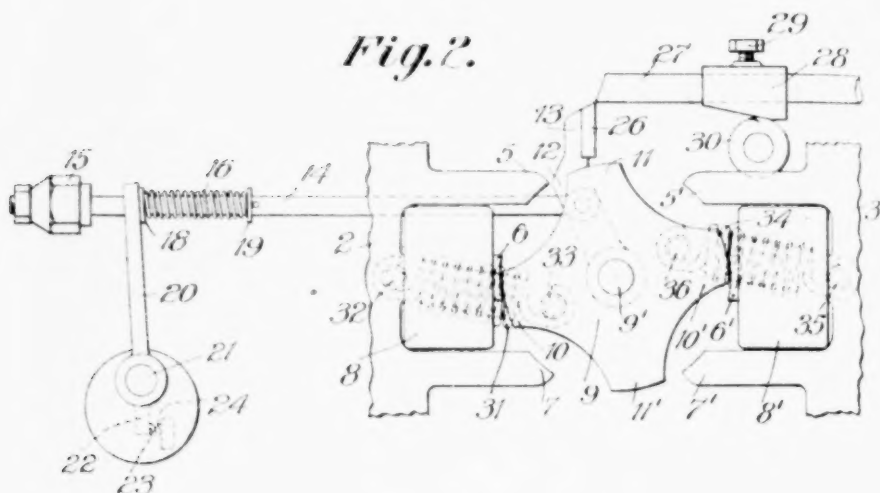
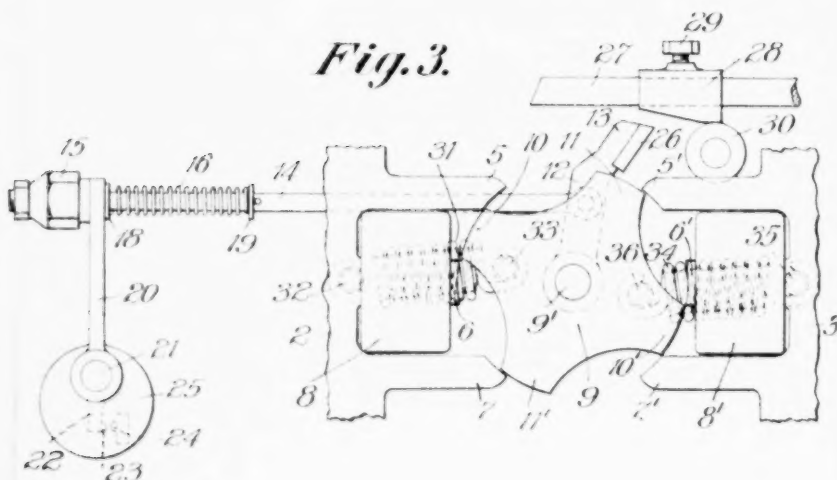


Fig. 3.



Witnesses

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UNITED STATES PATENT OFFICE.

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APPARATUS FOR GENERATING ALTERNATING CURRENTS.

1,053,107.

Specification of Letters Patent.

Patented Feb. 11, 1913.

Application filed January 30, 1909. Serial No. 473,171.

To all whom it may concern:

Be it known that I, JOHN L. MILTON, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented a certain new and useful Improvement in Apparatus for Generating Alternating Currents, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to a method of generating alternating currents, and an apparatus adapted to carry my method into operation.

The particular object of my invention is to provide a method and means for producing alternating currents in connection with the operation of gas engines. That is to say, the alternating currents are used for sparking purposes to ignite the combustible mixtures.

In order to facilitate an understanding of my method of generating alternating currents, I shall first describe a form of apparatus which I have devised for carrying out the various steps involved in my new method,—the understanding being, of course, that the particular form of apparatus shown is for the sake of illustration upon the scope of my invention as embodied in my novel method of generating alternating currents.

Referring to the drawings, Figure 1 is a front view of one form of inductor-alternator suitable for carrying out my method, the inductor being shown in its normal or initial position; Fig. 2 is a similar view of the same structure, the inductor being shown in the position in which it appears at the moment of release; Fig. 3 is a similar view of the same structure showing the position which the inductor assumes upon release under the influence of the springs.

The permanent magnets 1, shown in the drawings as straight-bar magnets, are at their ends secured to the ends of pole pieces 2 and 3. To facilitate connection between the magnets and the pole pieces, the ends of the magnets may be fork-shaped, so as to embrace snugly the end portions of the pole pieces, as indicated in Fig. 1. Bands 4 may be used for clamping the magnets together. It will be understood, of course, that the pole piece 2 connects poles of like polarity together.—say, for instance,

the north poles of the magnets—while the pole piece 3 connects the other like poles together, as for instance, the south poles.

The pole piece 2 is provided with three polar projections 5, 6 and 7, while the pole piece 3 is provided with corresponding polar projections 5', 6' and 7'. The polar projections 6 and 6' carry windings 8 and 8', respectively, while the other four polar projections are unwound. Mounted to move in proximity to the polar projections is the inductor 9 secured to a suitable supporting shaft 9'. In the instance illustrated, the shape of the inductor is that of a Maltese cross, having diametrically opposite arms 10, 10' and 11, 11'. Firmly seated on the shaft 9' is the arm 12, provided with a projection 13. Pivoted to this arm is a rod 14, which, as shown in Figs. 2 and 3, carries at its outer end a head 15. A compression spring 16 is situated between the collars 18 and 19 on the rod 14. The collar 19 is fixed on the rod, while the collar 18 is slidable thereon. The rod 14 works through an aperture in the contact arm 20, which is pivotally mounted on a shaft or stud 21. The arm 20 has an extension 22, which carries the movable contact 23, the latter co-operating with the fixed contact 24 on the support 25. Removably secured to the projection 13 on the arm 12 is a piece of hard metal, such as steel, 26, which is adapted to be engaged by the end of the reciprocating rod 27. This rod is connected with the crank shaft of the engine in any suitable way, and is provided with a cam piece 28. By means of the set screw 29 the position of this cam piece on the rod 27 may be adjusted. A roller 30 is disposed in the path of the cam member 28, whereby the latter will ride over the surface of the roller in order to break connection at the proper moment between the arm 12 and the rod 27, as will be presently described. An expansion spring 31 is at one end secured to the pole piece 2 at 32 and at its other end secured to the inductor 9 at 33. Similarly, the expansion spring 34 is at one end secured to the pole piece 3 at 35 and at its other end secured to the inductor 9 at 36. The connections between the pole pieces and the inductor by means of the springs are such that the initial or normal position of the inductor will be that indicated in Fig. 1. That is to say, the arms 10 and 10' are in proximity to the wound

tions 6 and 6', respectively, but are out of alinement therewith, whereby a substantial short circuit of the magnetic flux through the windings is prevented. It will be observed that this direct connection of the

5 springs to the polar pieces and the inductor is a very simple and effective one, and I consider it one of the novel features of the form of inductor-alternator herein shown.

10 From the above description of the device herein set forth, the various steps comprising my new method of generating high tension currents will now be readily understood, and I shall therefore proceed with an

15 explanation of my method. As above stated, the rod 27 is suitably connected with the crank shaft of the engine so that during the operation of the engine the rod 27 will be moved to the left into contact with the en-

20 gaging piece 26 on the arm 12. With the parts in their normal or initial position, as shown in Fig. 1, the reciprocating rod 27 will be moved to the left until after a certain interval it will be in the position shown in Fig. 2, from which it is seen that the cam

25 member 28 has ridden over the roller 30 and raised the rod 27 until the forward end thereof is just about to break engagement with the contact piece 26 of the arm 12.

30 Upon comparison of the position of the inductor as shown in Fig. 1 with its position as shown in Fig. 2, it will be seen that in being moved into what might be termed its operative position against the action of the

35 springs 31 and 34, the inductor first caused a substantial magnetic short circuit through the windings 8 and 8' at the moment when the arms 10 and 10' were in alinement with the polar projections 6 and 6', respectively;

40 then, the inductor being forced out of such alinement, partially interrupted such magnetic short circuit, thus decreasing the number of magnetic lines through the windings 8 and 8', until it finally reached the position

45 shown in Fig. 2. Now when the inductor has reached this position, it is released by the breaking of engagement between the rod 27 and the arm 12, whereupon the springs 31 and 34 assert themselves and

50 quickly move the inductor into the position in which it is shown in Fig. 3. Comparing the position of the inductor as shown in Fig. 2 with its final position as shown in Fig. 3, it will be noticed that during its

55 travel under the action of the springs the inductor first caused a magnetic short circuit through the windings 8 and 8' at the moment when the arms 10 and 10' were in alinement with the polar projections 6 and

60 6', respectively, and then immediately the inductor assumed its final position as shown in Fig. 3, in which position, it will be seen, the magnetic short circuit through the windings is at the moment of interruption.

65 With regard to the action of the compres-

sion spring 16 on the rod 14 it will be observed that when the arm 12 is forced to the left from the position in which it is shown in Fig. 1 to that in which it is shown in Fig. 2, the spring 16 will be compressed,

70 thus holding the arm 20 toward the left, whereby the contacts 23 and 24 will be firmly held together. However, when the engagement between the arm 12 and the rod 27 is broken, and the inductor moved into

75 the position in which it is shown in Fig. 3, the head 15 on the rod 14 will come into violent contact with the upper end of the arm 20, forcing the latter quickly to the right, whereby the contacts 23 and 24 are separated,

80 as shown in Fig. 3. This separation of the contacts, which causes an opening of the circuit in which the windings 8 and 8' are included, takes place substantially at the moment when the magnetic short circuit is broken; that is to say, when the inductor is in the position in which it is shown in Fig. 3. As is well understood, the breaking

85 of the iron path for the flux when the inductor has reached the position in which it is shown in Fig. 3 generates a current of high electromotive force, which surging through the ignition circuit leaps across the sparking terminals to ignite the combustible

90 mixtures in the cylinders of the gas engine. The inductor will, of course, not retain the position in which it is shown in Fig. 3 for the reason that that position is due to the moment of inertia of the inductor and the moving parts connected therewith, whereby

95 the sudden action of the springs carries the inductor beyond its normal position. The extreme position of the inductor, as shown in Fig. 3, is more or less only momentary and it will immediately assume its normal position, as shown in Fig. 1, under the influence of the springs. I wish to call particular attention to the position of the inductor

100 as it is shown in Fig. 2.

I discovered in experimenting with a machine constructed substantially as herein described that if the inductor be quickly carried, as is the case when it is operated by an engine at full speed from its initial position, as shown in Fig. 1, into a position in

110 which the arms 10 and 10' are in alinement with the polar projections 6 and 6' and then released, the result was a very feeble spark. Upon investigation I found that by using a very strong pair of springs the spark

115 would be increased, when the inductor was operated by the engine at full speed, and that by using a weaker pair of springs the spark would, under the same circumstances, not be perceptible. But if the inductor was

120 slowly brought to the above-mentioned position in which the arms 10 and 10' are in alinement with polar projections 6 and 6', or if it was brought quickly into this position and then allowed to rest for a moment

125 130

and then released, the return of the inductor under the influence of the springs would result in a very powerful spark. However, these conditions of operation do not obtain in the practical use of a gas engine, especially on automobiles where the speed of the engine varies between low speed and full speed, and where there would be no period of rest for the engine, such as is mentioned in the preceding sentence. However, even with the use of weak springs upon carrying the inductor beyond the position in which it causes a substantial magnetic short circuit into a position such as that shown in Fig. 2, where the short circuit is at least partially interrupted, and then releasing the inductor, the result was the production of a very powerful spark, at all speeds of operation of the engine. Now, as I comprehend it, the difference in the result obtained by operating the machine in the several ways as just described is due to the fact that in the first instance the electromotive force generated during the backward movement of the inductor had to spend itself largely in overcoming or neutralizing the high self-induced electromotive force which was set up when the inductor (operated by the engine at full speed) quickly caused a substantial magnetic short-circuit through the windings 8 and 8', so that the effective electromotive force was considerably small as compared with the generated electromotive force. However, by carrying the inductor beyond a position of alinement with the polar projections 6 and 6' into a position such as shown in Fig. 2, in which the magnetic short circuit has been partially and sufficiently interrupted, there is generated an electromotive force which opposes or cuts down the high self-induced electromotive force set up at the moment of the magnetic short circuit. The result of this cutting down or partial neutralization of that high self-induced electromotive force is that upon again establishing the magnetic circuit and immediately interrupting it, the electromotive force generated at the moment of interruption might be said to encounter a clear field,—that is to say, it does not have to weaken itself in opposing or killing off a high counter-electromotive force surging through the windings. As will be seen, this method of operation permits the use of very weak springs, which are highly desirable for mechanical reasons.

It will thus be seen upon an examination of the different positions in which the inductor is shown in Figs. 1, 2 and 3 during the operation of the device that the method which I have invented, or generating high induction currents consists first in increasing the number of magnetic lines through the windings, as by causing a substantial magnetic short-circuit through the windings, then decreasing the number of mag-

netic lines through the windings in order to generate a self-induced electromotive force that will kill off the self-induced electromotive force which was set up by the current generated at the moment of the magnetic short-circuit, momentarily stopping the magnetic changes here before reversal, and then suddenly increasing and decreasing in quick succession the number of magnetic lines through the windings, the result of these various steps being the generation of a high tension current sufficient to produce sparks of considerable magnitude.

Of course it is understood, as I have already indicated, that the form of apparatus herein described is only illustrative of apparatus that may be employed to carry my method into operation, and that so far as the method is concerned other forms and modifications may be devised to carry my invention into effect.

As concerns the construction of the particular embodiment of inductor-alternator herein set forth, I do not wish to be confined to any of the details thereof any more than is described in the appended claims. It should be clear, for instance, that my novel arrangement of the springs and their connections with the moving and stationary parts of the inductor-alternator may be employed with various other forms of field structure and inductors, and still fall within the scope of my invention as defined in certain of the claims.

In my copending application, Serial No. 443,608, filed July 15, 1908, I claim matter which is disclosed but not claimed in this application, to wit, the generally circular contour of the field magnet structure with respect to the axis of the rotor.

Having thus described my invention, what I claim as new and desire to secure by Letters Patent of the United States is:

1. An inductor-alternator comprising, in combination, a magnetic field-frame provided with oppositely disposed pole-pieces, each of said pole-pieces having three polar projections, windings on the middle projections, an inductor mounted to move between said polar projections and provided with four radial arms to vary the magnetic flux through said windings, spring-means secured to said inductor and said field-frame for normally holding the inductor in a predetermined position relative to said polar projections, and means for periodically moving said inductor out of its normal position against the action of said spring-means, whereby said inductor will upon release move in the reverse direction under the action of said spring-means.

2. An inductor-alternator comprising, in combination, a magnetic field-frame provided with oppositely disposed pole-pieces, each of said pole-pieces having three polar

projections, windings on the middle projections, an inductor mounted to move between said polar projections and provided with four radial arms to vary the magnetic flux through said windings, a pair of oppositely disposed springs secured each at one end to said inductor and at its other end to said field-frame for normally holding the inductor in a predetermined position relative to said polar projections, and means for periodically moving said inductor out of its normal position against the action of said springs, whereby said inductor will upon release move in the reverse direction under the action of said springs.

3. An inductor-alternator comprising, in combination, a magnetic field-frame provided with a pair of polar projections having windings thereon, a movable inductor having a pair of radial arms to co-act with said polar projections for varying the magnetic flux through said windings, spring-connections between said inductor and said field-frame for normally holding the inductor-arms in proximity to said polar projections but out of alinement therewith, and means for periodically moving said inductor-arms into alinement with said projections and beyond such position, whereby said inductor will upon release move in the reverse direction under the action of said spring-connection to generate a sparking-current.

4. An inductor-alternator comprising, in combination, a magnetic field-frame provided with a pair of diametrically opposite polar projections having windings thereon, a movable inductor having a pair of oppositely extending arms to coact with said polar projections for varying the magnetic flux through said windings, a pair of oppo-

sitely disposed spring-connections between said inductor and said field-frame for normally holding the inductor-arms in proximity to said polar projections but out of alinement therewith, and means for periodically moving said inductor-arms into alinement with said projections and beyond such position, whereby said inductor will upon release move in the reverse direction under the action of said spring-connections to generate a sparking-current.

5. An inductor-alternator comprising, in combination, a magnetic field-frame provided with oppositely disposed pole-pieces each of said pole-pieces having three polar projections, windings on the middle projections, an inductor mounted to move between said polar projections and provided with four radial arms to vary the magnetic flux through said windings, spring-connections between said inductor and said field-frame for normally holding the inductor in a position such that a pair of diametrically opposite arms will be in proximity to said middle polar projections but out of alinement therewith, and means for periodically moving said inductor out of its normal position, so that said pair of arms will first come into alinement with said middle polar projections and then pass beyond such position, whereby said inductor will upon release move in a reverse direction and generate a sparking-current.

In witness whereof, I hereunto subscribe my name this 22nd day of January, A. D. 1909.

JOHN LEWIS MILTON.

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INDUCTOR GENERATOR FOR IGNITION PURPOSES.

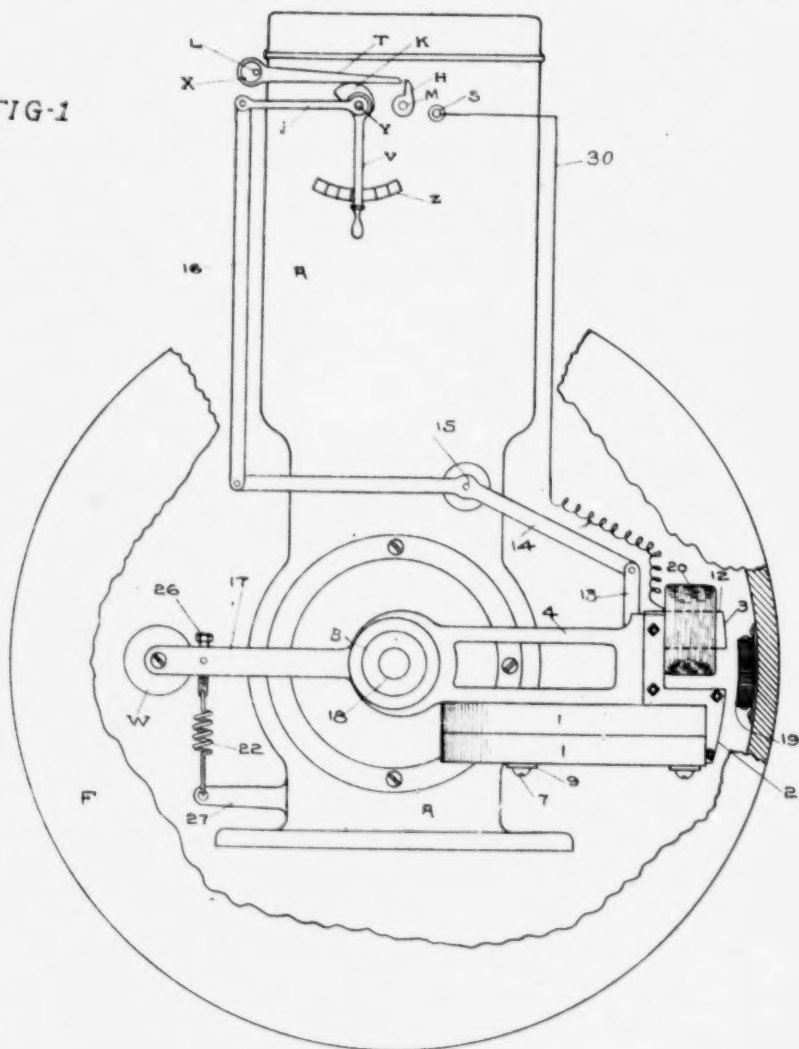
APPLICATION FILED SEPT. 25, 1901.

1,056,360.

Patented Mar. 18, 1913.

3 SHEETS-SHEET 1.

FIG-1



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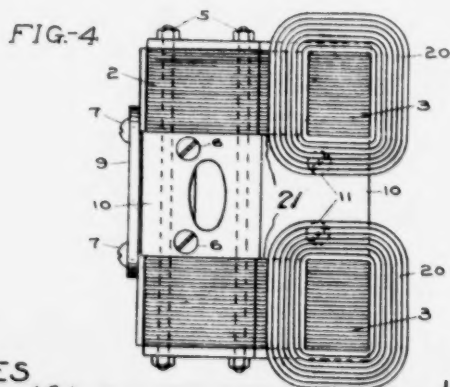
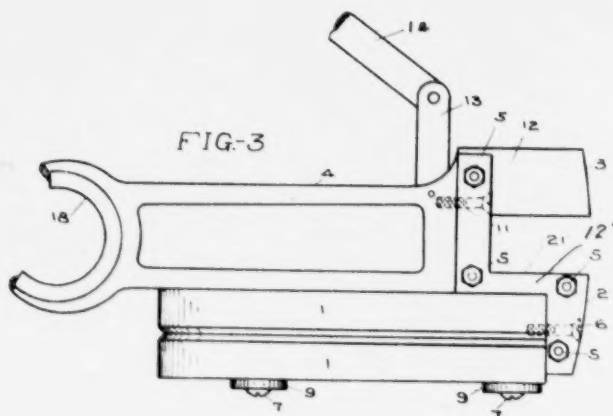
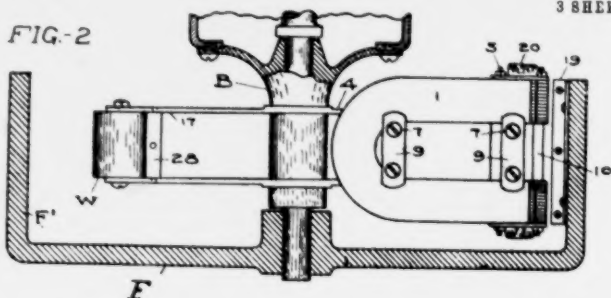
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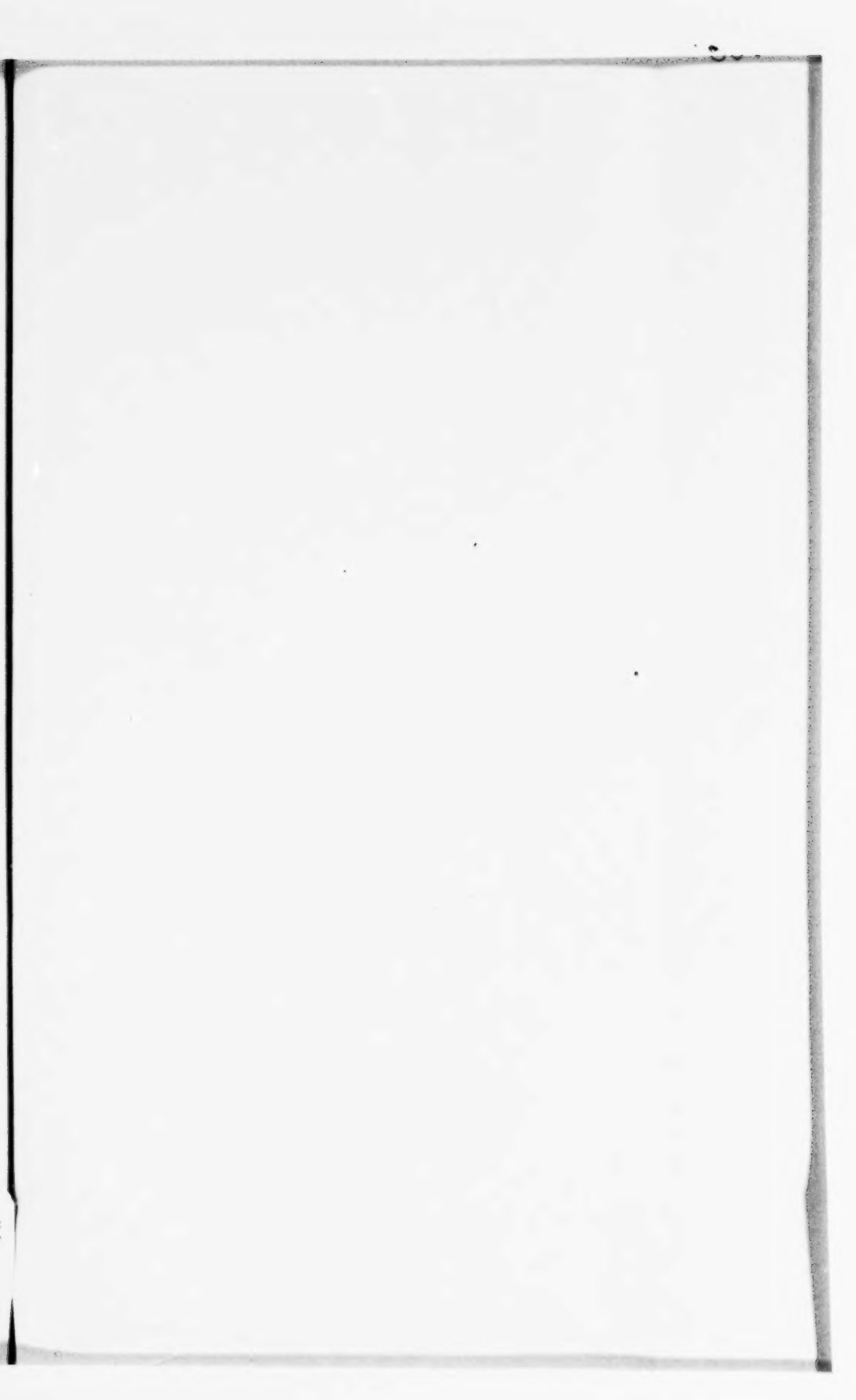
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3 SHEETS-SHEET 2



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3 SHEETS-SHEET 3.

FIG. 5.

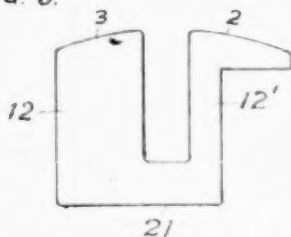


FIG. 7.

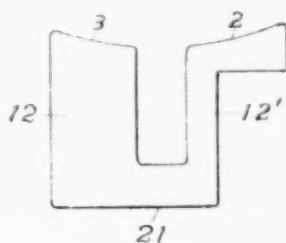


FIG. 8.

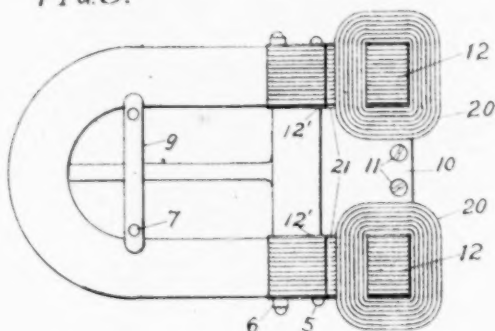


FIG. 6.

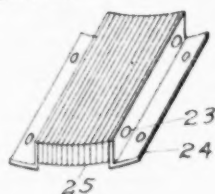
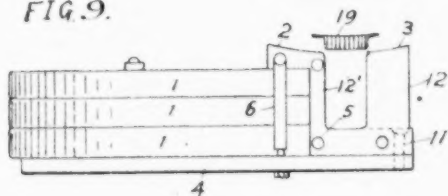


FIG. 9.



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INDUCTOR-GENERATOR FOR IGNITION PURPOSES

1,056,360.

Specification of Letters Patent.

Patented Mar. 18, 1913.

Application filed September 25, 1901. Serial No. 76,559.

To all whom it may concern:

Be it known that we, TESLA EMIL PODLEŠÁK and HENRY JOSEPH PODLEŠÁK, citizens of the United States, and residents, respectively, of Brooklyn, county of Kings, and State of New York, and Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Inductor-Generators for Ignition Purposes, of which the following is a clear and concise specification, reference being had to the several drawings, which are a part thereof.

This invention relates to inductor alternators for ignition purposes.

It essentially pertains to inductor alternators capable of producing electrical effects suitable for the ignition of combustible charges in internal combustion motors.

One object of our invention is to so arrange and correlate the permanent field magnets to the other elements of an inductor alternator, that in operation the permanent magnets will be kept magnetized and built up.

Another object of our invention is to provide an inductor alternator which is readily adaptable to all classes of internal combustion motors, such as automobile, marine, and stationary motors, and to the special requirements of each class, and is readily adjustable for varying the period of generation of maximum electro-motive force relative to the position of a piston within an engine cylinder.

Figure 1 is a side elevation of a motor fitted with an inductor alternator embodying our invention, the fly wheel of the motor being shown partly broken away and partly in section. Fig. 2 is a plan view of the inductor alternator as mounted on the crankshaft bearing of the motor shown in Fig. 1, the flange wheel being shown in section and the crankshaft bearing partly in section. Fig. 3 is a side elevation of the normally stationary part of the inductor alternator, detached, the induction windings being removed. Fig. 4 is an end view of parts shown in Fig. 3, the induction windings being shown in place. Fig. 5 is a side elevation of one of the sheet metal punchings or sections of which the pole pieces of the inductor alternator shown in Figs. 1, 2, 3, and 4 are composed. Fig. 6 is a perspective

view of an inductor, detached, suitable for the above form of inductor alternator. Fig. 7 is a side elevation of a sheet metal punching or section for pole pieces of a modified form. Fig. 8 is a plan view of a modified form of inductor alternator embodying our invention. Fig. 9 is a side elevation of Fig. 8, the induction windings being removed and the inductor shown in place.

In the drawings—A represents an internal combustion motor of any well known construction. B indicates the crank shaft bearings at either side of said motor, the crank shaft itself being represented by 18.

F is the fly wheel of the motor having an inwardly extending flange F'.

1 indicates a permanent magnet preferably horseshoe or U-shaped in form. It is composed of as many magnet sections, arranged in a series, as may be required to establish the desired density of magnetic field.

4 is a frame, preferably of non-magnetic material, and employed to position and support in proper relation to each other the normally stationary parts of our inductor alternator. In the drawings, this supporting and positioning frame is mounted upon a crank shaft-bearing B at one side of the motor, and is capable of adjustment about the axis of the said crank shaft.

9 are clamp pieces or cleats arranged to bear against the outermost magnet section in the series, and 7 are bolts or screws extending through said cleats and into the frame 4, and adapted to clamp or bind the said frame and permanent magnet together.

21 are pole pieces composed of a suitable number of punchings or laminae shown in Fig. 5. A pair of these pole pieces is preferably used, assembled, one at either side of a suitable center piece or spacing piece 10 of non-magnetic material, and suitably bolted thereto by means of bolts 5. This non-magnetic spacing piece 10 is suitably secured to the frame 4 by means of bolts or screws 11, so as to hold the laminated pole pieces 21 in close magnetic contact with the ends or poles of the permanent magnet sections.

Each one of the pole pieces has a pair of polar projections 12, 12', the former of which serves as a coil core upon which a winding or coil 20 of insulated wire is

slipped, and to which the said coil is suitably secured. The coil core 12 on each pole piece is spaced by a suitable air gap from the adjacent polar projection 12' on said pole piece. The outer faces or polar faces of the said polar projections 12, 12', are suitably shaped to conform to the path of travel of a suitable inductor, hereinafter described. The polar faces on the polar projections 12' are designated by 2, and hereinafter referred to as exciting polar faces, and the polar faces on the polar projections 12 are designated by 3, and hereinafter referred to as generating polar faces.

19 is an inductor, preferably formed of punchings or laminae of suitable metal. This inductor is adapted to be rotated so as to have one of its faces pass over and closely adjacent to the exciting polar faces 2 and the generating polar faces 3, by mere mechanical clearance, or, in other words, as close to said polar faces as mechanical conditions will permit. We have shown the said inductor 19 as secured to and carried by the flange F' of the fly wheel F of the motor. The polar faces 2, 3, and the face of the inductor which passes adjacent to them are shaped to the arc of a circle struck from the axis of the crank shaft as a center.

Normally the lines of magnetic force emanate in a scattered way, from all sides of the magnet for about one-half of its length from its free ends, and some of these lines of force emanate from the pole pieces.

The inductor 19, in operation, first spans the exciting polar faces 2 and causes the concentration of a dense flow of magnetic lines of force, a substantial magnetic short circuit, between the polar projections 12' of the laminated pole pieces. The inductor then moves across the air gap between the exciting polar faces and the generating polar faces and causes a rapid and substantially complete diversion of the magnetic flux density, first concentrated across the exciting polar faces, into and through the coil cores 12 and across the generating polar faces, so as to establish a substantial magnetic short circuit across the generating polar faces. The inductor then leaves the generating polar faces, and the magnetic flux density through the induction windings is rapidly diminished, due to the fact that the lines of magnetic force instantly seek the path of least reluctance between the magnet poles.

With an inductor alternator constructed in accordance with our invention, the inductor does not at any time move sufficiently closely to the limbs of the magnets themselves to draw or concentrate a dense magnetic flux across the limbs of the magnets above the poles thereof, but on the contrary, we have so constructed and arranged the elements of an inductor alternator for ig-

nition purposes, that the inductor in its operation tends only to draw or concentrate the magnetic flux emanating from the magnet poles at the free ends of said magnet, thereby tending to prevent the shifting of the said poles and to overcome the tendency of the said poles to shift, with consequent loss of magneto-motive force by the magnets. The electro-motive force is generated in the inductive windings 20, as in all dynamo-electric generators, by varying the magnetic flux density in the said windings. The inductor 19 operates to cause a very rapid varying of the magnetic flux density by first establishing a substantial magnetic short circuit, *i. e.*, by concentrating the magnetic flux at a point adjacent to but outside of the induction windings, so that the magnetic flux density in the cores of said windings is practically zero, then quickly diverting the magnetic flux through the coil cores, and then, practically instantly, permitting the magnetic flux density in said coil cores to again drop to substantially zero.

With multi-cylinder motors, two or more inductors are used, there being one inductor for each cylinder, as will readily be understood, unless the periods of ignition of two or more of said cylinders occur at the same period of the stroke at alternate revolutions. In any case, an inductor must be provided and so arranged that it will pass over and span the generating polar faces when the ignition of a combustible charge is required. Also, when the motor is arranged for two or more ignitions, usually termed "late", "early", etc., it may prove desirable to use one inductor for each of such ignitions, and to mount and hold stationary the permanent magnet and induction windings.

In Figs. 1 and 2, the frame 4 of the inductor alternator is shown pivoted or journaled on the bearing B of the crank shaft at one side of the motor, as hereinbefore mentioned, in order that it may be oscillated through a part of a revolution to vary the instant of generation of maximum electro-motive force, so as to accommodate the generator for operation with mechanism for varying the period of ignition within the engine cylinder.

13 is a link connected at its lower end with the generator frame, and having its upper end suitably connected to one end of a lever 14 which is pivoted at 15 to the frame of the motor. The mechanism for advancing or retarding the time of ignition within the engine cylinder may be of any suitable and well known type. For the purpose of illustrating our invention, we have shown in drawings, more or less diagrammatic, such a mechanism.

K is a cam connected to move with a crank lever V, said lever being pivoted

Y to the cylinder of the motor, and adapted to be oscillated and retained in any desired position of adjustment by the engagement of its downwardly extending arm with one of the teeth of a rack section Z.

16 is a link connected at its lower end to the upper end of the lever 14, and having its upper end connected to the outer end of the arm j of the bell crank lever V.

The make and break mechanism within the cylinder may be of any well known and suitable construction. We have diagrammatically illustrated it as consisting of an insulated stationary electrode S and a movable electrode M, the latter having on the outside of the cylinder a laterally projecting arm H. Springs or their equivalents for controlling the operation of the electrode M in the well known manner, are, for the sake of clearness, not shown. The movable electrode M is actuated by a reciprocable trip rod T, which has one end mounted on an eccentric X carried by a shaft L, driven from some suitable member of the motor. The driving connection for the shaft L, for the sake of clearness, has not been shown. The free end of the trip rod T rests upon the cam K, and is guided by it. By adjusting the said cam, the trip rod T is caused to bring about the separation of the electrodes within the cylinder relatively sooner or later in the stroke of the piston. The connections between the said bell crank lever V and the frame 4 are so proportioned and correlated that, as the period of ignition in the cylinder is changed by the operation of the bell crank lever to either advance or retard the spark, the electric generator is also shifted or adjusted into a position to generate the requisite electro-motive force at the moment of the electrodes of the make and break apparatus in the cylinder separate to produce the desired spark.

W is a weight secured between the arms 17 extending from the frame 4, the said weight being suitable to counterbalance the weight carried at the opposite end of the said frame 4. 22 is a spring having its lower end attached to a bracket 27 carried by the motor frame, and its upper end secured to an adjusting screw 26 which extends through a cross bar 28 carried by the arm 17. This spring serves to supplement the weight W and affords an additional means for facilitating the adjustment of the electric generator.

The induction windings 20 on the coil cores 12 are composed of convolutions of insulated wire wound continuously in each coil. The coils are wound on forms, and preferably impregnated with some insulating varnish or compound that is impervious to oil and water. They are suitably covered for protection and arranged to slip over the coil cores to which they are secured.

The winding on the coil core of each pole piece may be in one or more separate coils, all of which are suitably and properly connected together, either in parallel or in series, as may be desired. The terminals of the induction windings are suitably connected to the electrodes of the igniter. As shown in Fig. 1, the stationary insulated electrode S is connected to one of the terminals of the induction windings by a conductor 30, the other terminal of the windings being suitably grounded and thus connected to the movable electrode M, which is grounded as is usual.

In Figs. 8 and 9 is shown another form of the inductor alternator in which the polar faces of the pole pieces are curved oppositely, with respect to the magnet sections, to the way the polar faces are curved in the form shown in Figs. 1, 2, 3, and 4. In the form shown in Figs. 8 and 9 the wheel or support for carrying the inductor may, by making the curvature of the polar faces of a short radius, be made of short radius, which is desirable in some cases.

We do not limit ourselves to the precise construction shown and described, as our invention may be embodied in other forms of construction.

What we claim and desire to secure by Letters Patent is:

1. In an inductor generator, the combination of a permanent magnet provided with a pair of laminated pole pieces, one in magnetic contact with each pole of the magnet and extending laterally therefrom, two polar projections on each pole piece each terminating in a polar face, said polar faces constituting a substantially cylindrical polar surface, windings carried by the adjacent polar projections on said pole pieces, and an unwound inductor rotatable about an axis substantially parallel to the polar surface and in proximity to the polar faces to vary the magnetic flux therethrough, said inductor substantially short-circuiting the magnetic flux through the unwound polar projections when it is in one position and through the wound polar projections when it is in another position.

2. In an inductor generator, the combination of a rotatable shaft, an unwound inductor carried by the shaft and having a polar face curved in the arc of a circle struck from the axis of the shaft as a center, a permanent magnet provided with a laterally extending pole piece at each of its poles, a pair of polar projections on each pole piece and each terminating in a polar face, said polar faces constituting a polar surface curved to correspond with the polar face of the inductor, an inductive winding on one polar projection of each pole piece, said inductor substantially short-circuiting the magnetic flux through the unwound polar projections

when it is moved into one position and through the wound polar projections when it is moved into another position.

3. In an inductor generator, the combination of a permanent magnet, a pair of pole pieces arranged in magnetic contact with the poles of said magnet and extending laterally therefrom, each pole piece having a pair of polar projections provided with polar faces, a winding carried by one of the polar projections, and an unwound inductor having a polar surface movable in the proximity to said polar faces and serving to establish a substantially short circuit of the magnetic flux through one set of polar projections and outside of the winding when said inductor is in one position and through the other set of polar projections and through the windings when said inductor is in another position.

4. In an inductor generator, the combination of a permanent magnet, a pair of laminated pole pieces held in magnetic contact with the poles of said magnet and extending laterally therefrom, each pole piece having a pair of polar projections terminating in polar faces, an inductive winding on one polar projection of each pole piece, the other polar projection of each pole piece being unwound, and an unwound inductor movable in proximity to said polar faces to concentrate the magnetic flux alternately through the unwound polar projections and through the wound polar projections.

5. In an inductor generator, the combination of a permanent magnet, two laminated pole pieces held in magnetic contact one with and extending laterally from each pole of the magnet and having each two polar projections terminating in polar faces constituting a cylindrical polar surface, inductive windings on the adjacent polar projections of said pole pieces, the other polar projection on each pole piece being unwound, and an unwound inductor movable about an axis substantially parallel to the polar surface and in proximity to the polar faces to concentrate the magnetic flux alternately through the wound polar projections and through the unwound polar projections.

6. In an inductor generator, the combination of a permanent magnet, a pole piece in magnetic contact with each pole of said magnet and extending laterally therefrom, each pole piece being provided with two polar projections terminating in polar faces, a winding in inductive relation to one polar projection on each pole piece, a common means formed of non-magnetic material for supporting both pole pieces, means for holding the pole pieces in magnetic contact with the magnet, and means formed of magnetic material movable in proximity to the polar faces to establish a substantial short circuit of the magnetic flux alternately through the

unwound polar projections and through the wound polar projections.

7. In an inductor generator, the combination of a permanent magnet having a pole piece in magnetic contact with and extending laterally from each pole, said pole pieces being provided each with two polar projections terminating in polar faces constituting a cylindrical polar surface, a winding on one of said polar projections, and an inductor movable in proximity to said polar faces to vary the magnetic flux through the wound polar projection.

8. In an inductor generator, the combination of a field magnet having pole pieces extended laterally therefrom and terminating in polar faces constituting a cylindrical polar surface, means for supporting the pole pieces and holding them in magnetic contact with said magnet, windings on said pole pieces, and an inductor movable in proximity to said polar faces to vary the magnetic flux through said winding.

9. In an inductor generator, the combination of a field magnet having pole pieces extended laterally therefrom and terminating in pole faces forming a cylindrical polar surface, means for holding said pole pieces in magnetic contact with the poles of said magnet, a winding on one of said pole pieces, an annular member carried on a shaft substantially parallel to said surface, and an inductor mounted axially upon said annular member to move in proximity to said pole faces for varying the magnetic flux through said winding.

10. In an inductor generator, the combination of a permanent magnet provided with pole pieces in magnetic contact therewith and extended laterally therefrom and terminating in polar faces, an inductive winding on one of said pole pieces, an inductor, and means to carry the inductor in proximity to the polar faces to vary the magnetic flux therethrough.

11. In an inductor generator, the combination of a field magnet having pole pieces in magnetic contact therewith and extended laterally therefrom and terminating in polar faces, means for holding said pole pieces in magnetic contact with the poles of said magnet, an inductive winding on one of said pole pieces, an annular rotatable member surrounding said field magnet, and an inductor mounted on the inside of said annular member with its length parallel to the axis of the latter and arranged to move in proximity to said polar faces to vary the magnetic flux through said winding.

12. In an inductor generator, the combination of a permanent magnet, a polar extension in magnetic contact with one of the poles of the magnet and extending laterally from the magnet and terminating in a polar face, a polar extension in magnetic contact

with the other pole of and extending laterally from the magnet and provided with two polar projections terminating in polar faces, a winding on one of said polar projections, and an unwound inductor movable in proximity to the said polar faces to vary the magnetic flux first through one of said polar projections and then through the other said polar projection.

13. In an inductor generator, the combination of a permanent magnet, a pole piece in magnetic contact with one pole of said magnet and extending laterally from the magnet and provided with a polar face, a pole piece in magnetic contact with the other pole of and extending laterally from said magnet and including a laminated core, having a polar face, a winding on said core, and an inductor movable in proximity to said polar faces to vary the magnetic flux there-through.

14. In an inductor generator, the combination of a laminated permanent magnet, two laminated pole pieces extending laterally from the magnet, one in magnetic contact with the pole of the magnet and each provided with two polar projections terminating in polar faces constituting a cylindrical polar surface, means of non-magnetic material for supporting the pole pieces and holding them in magnetic contact with the poles of the magnet, an inductive winding on one polar projection of each pole piece, a rotatable shaft whose axis is substantially parallel to said polar surface, and an inductor carried by said shaft and movable in proximity to said polar faces to vary the

magnetic flux therethrough, said inductor establishing a substantially magnetic short circuit alternately through the unwound polar projections and through the wound polar projections.

15. In an inductor alternator, the combination of a support, a permanent magnet, pole pieces, a spacing element between the pole pieces, fastenings extending through the pole pieces and element to secure them together, and means for fastening the said element to the support with the pole pieces in contact with the magnet.

16. In an inductor alternator, the combination of a spacing element of non-magnetic material, pole piece laminæ on opposite sides thereof, bolts passing through the laminæ and spacing element for securing the said parts rigidly together as a unitary structure, with a magnet in contact with the pole pieces, and a common support to which the magnet and said structure are independently fastened.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

TESLA E. PODLESÁK.
HENRY JOSEPH PODLEŠÁK.

Witnesses to the signature of Tesla E. Podlesák:

JAMES OWEN,
H. C. HOLBROW.

Witnesses to the signature of Henry Joseph Podlešák:

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WILLIAM WEBBER.

J. L. MILTON.
MAGNETO GENERATOR.
APPLICATION FILED OCT. 28, 1910.

1,096,048.

Patented May 12, 1914.

2 SHEETS-SHEET 1.

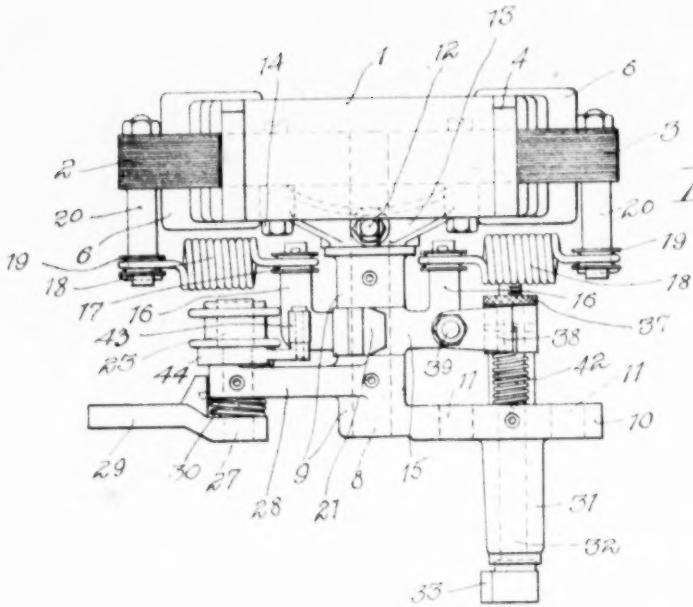


Fig. 2.

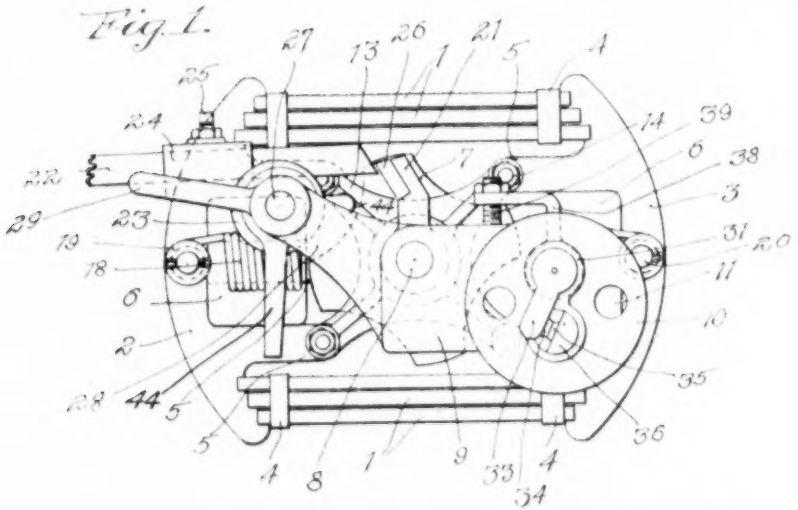


Fig. 1.

WITNESSES

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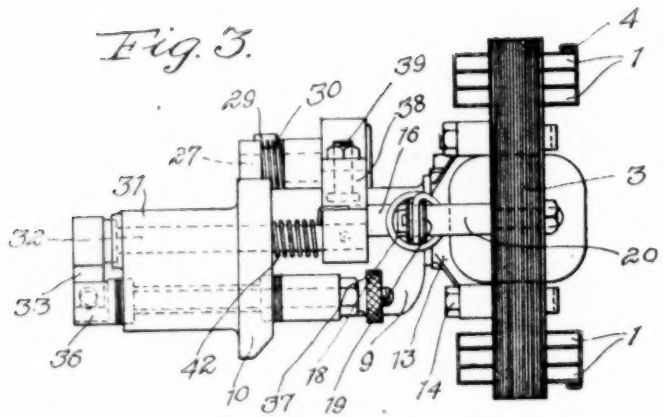
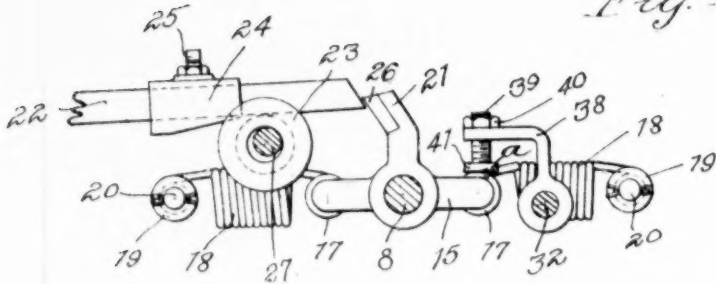
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1,096,048.

Patented May 12, 1914

2 SHEETS-SHEET 2



WITNESSES

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UNITED STATES PATENT OFFICE.

JOHN LEWIS MILTON, OF TIFFIN, OHIO.

MAGNETO-GENERATOR.

1,096,048.

Specification of Letters Patent.

Patented May 12, 1914.

Application filed October 28, 1910. Serial No. 589,561.

To all whom it may concern:

Be it known that I, JOHN L. MILTON, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented a certain new and useful Improvement in Magneto-Generators, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to magneto generators and ignition mechanism for use in connection with internal combustion engines.

The object of my present invention is to obtain a cheap and efficient construction while at the same time a construction which will prevent undue hammering of the ignition contacts.

One of the principal features of my invention resides in a malleable iron casting and the parts with which it coöperates in causing the oscillation of the generator inductor and in controlling the movements of the spark contacts. The use of this single malleable iron casting provides a rigid construction and at the same time one which transmits the necessary motion from the engine mechanism to the inductor of the generator, and which also by means of a cam surface carried on one of its arms actuates the contact mechanism to cause a sudden separation of the contacts followed, however, by a slow and easy reengagement thereof. Since in the construction of my invention these spark contacts are brought slowly and easily together, excessive wear is avoided by the prevention of hammering which would otherwise take place.

My present invention may in a general way be regarded as an improvement upon my co-pending application, Serial No. 475,171, filed January 30, 1909. In that earlier application I disclosed an inductor generator having stationary windings and an oscillating inductor, this inductor being actuated in one direction by power supplied from the engine with which it was associated, there being provided a set of springs for returning the inductor sharply to its normal position and beyond, when the inductor was released.

My present invention also utilizes a set of springs for returning the inductor in a reverse direction whenever it is released by the

mechanism which actuates the inductor to carry it into its abnormal position.

My present invention consists also in an arrangement whereby unnecessary hammering of the contacts is avoided, where the reciprocations of the operating rod are more frequent than the ignition periods, this arrangement consisting of mechanism for throwing the inductor out of action except during such time as the spark is required to pass for ignition purposes.

These and the various other features of my invention will be more clearly understood by reference to the accompanying drawings, in which—

Figure 1 is a front elevation of the generator and its associated parts; Fig. 2 is a plan view thereof; Fig. 3 is an end elevation; Fig. 4 is an isolated elevation of the actuating mechanism.

Like reference characters are applied to the same parts throughout the various figures.

The generator proper comprises the permanent magnets 1, 1, whose consequent poles are secured to the ends of the pole-pieces 2 and 3. The bands 4, 4 clamp the magnets together and hold them in position upon the laminated pole-pieces.

Each of the pole-pieces is provided with three polar projections 5, 5, the middle projection in each instance carrying a winding 6. Rotatably mounted within the embrace of the polar projections is the inductor 7 carried upon the shaft 8. This inductor has generally the shape of a Maltese cross with diametrically opposite arms adapted when in one position to convey the magnetic flux of the permanent magnets through the polar projections on which the windings 6 are laid and when in the alternate position to short-circuit the magnetic flux around these central poles.

The shaft 8, which carries the oscillating inductor is journaled in the bracket 9 which extends from the plate 10, this plate being provided with openings 11, 11, through which bolts pass to secure the plate directly to the cylinder or other combustion chamber of an internal combustion engine. The arms of a brass spider 13 are attached to the polar projections of the field magnet by the bolts 14, 14, the hub of the spider in turn being mounted upon a boss extending from the

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bracket member 9, the spider and thus the field magnet being held in fixed position by means of the set screw 12.

An actuating yoke 15 of malleable iron is mounted upon the shaft 8 between the two journals of the bracket member 9, the yoke and the shaft being keyed together preferably by means of a taper pin. The yoke is provided with two arms 16, 16 which extend from diametrically opposite sides of the hub, where they turn and become parallel with the shaft 8 at diametrically opposite positions. At the end of each arm is a grooved roller 17. The free ends of the helical actuating springs 18, 18 are hooked over these rollers, the other ends of the springs being hooked over similarly grooved rollers 19, 19 carried by posts 20, 20 extending from the field pole-pieces 2 and 3. These posts are mounted at diametrically opposite points, wherefore the actuating springs tend always to return the yoke 15 and thus the inductor to their normal position.

A steel faced operating arm 21 extends upwardly from the hub of the yoke 15 where it is adapted for engagement by the end of the reciprocating rod 22 connected and driven in any suitable manner from the shaft of the engine with which the ignition mechanism is associated. A roller 23 carries the free end of the actuating rod 22 except when the lower cam surface of the adjustable sleeve 24 rides up on the roller to disengage the end of the actuating rod from the face of the operating arm 21. The exact time in the cycle of the engine at which this release of the yoke and hence of the inductor takes place may be regulated by adjusting the position of the sleeve 24, the set screw and nut 25 serving to maintain the proper adjustment. The hardened steel face 26 of the operating arm 21 will prevent undue wear at this point.

The roller 23 is eccentrically mounted upon a post 27 which is carried by an arm 28 extending from the bracket 9. A starting lever 29 is keyed to the end of the post 27 whereby the post may be turned in one direction or the other to raise or lower the roller 23 due to its eccentric mounting upon the end of the post. A small spring 30 connected with the starting lever 29 and with the extension 28 tends to hold the starting lever always in the running position. When it is desired to retard the production of the spark at the contact points as in starting the engine, the lever 29 is thrown manually into a position in which the roller 23 is lowered, thereby delaying slightly the disengagement of the end of the actuating rod from the corner of the operating arm 21 and thus delaying also the spark production.

Coming now to the mechanism for controlling the operation of the contacts, a boss 31 will be seen to extend from the bolting

plate 10. Through this extends a spindle 32. At the end of the spindle is a swinging contact arm or crank 33 upon which is mounted the platinum or other contact point 34 adapted for operation with the contact point 35, mounted upon the post 36 suitably insulated from the plate 10 and the other parts of the mechanism. The post 36 terminates in a binding screw 37 to which the conductor leading from one end of the field magnet windings is electrically connected. At the other end the contact spindle 32 is provided with an L-shaped arm 38 through which passes the adjusting screw 39 of the anvil 41, the lock nut 40 serving to maintain the adjustment. A very light helical spring 42 surrounds the spindle 32 between the plate 10 and the arm 38 and, being connected at one end with the plate 10 and at the other end with this actuating crank 38, it tends to turn the spindle 32 in a direction which will bring the contact points 34 and 35 into engagement with one another. The drawings show these several parts in their normal positions.

The position of the anvil 41 is such that the upper surface of an arm 16 of the yoke 15 will engage it to cause a separation of the contact points 34 and 35. It will be noted that the arm 16 forms a curved cam surface *a* adapted to engage the lower side of the anvil 41 whereby the overrunning of the inductor and yoke piece 15 upon their release from the actuating rod 22 will cause this cam surface to engage the anvil with a sharp sudden hammer-like blow, thus causing a correspondingly sudden opening of the contact points 34 and 35. The actuating springs 18 promptly return the yoke member 15 to its normal position after the overthrow which follows the release of its operating arm 21 from the pressure of the actuating rod 22. During this return movement the anvil 41 rides smoothly and easily over the curved cam surface of the engaging arm 16 of the yoke 15. The light spring 42 causes the actuating crank 38 to follow the yoke arm 16 in this return movement, thereby causing the contact points 34 and 35 to be returned slowly and easily to their normal contact positions. The surface of the arm which acts as a cam in conjunction with the anvil 41 is curved as shown in the drawing to avoid the pounding of the contact mechanism. The distance between the anvil 41 and the cooperating cam surface *c* of the yoke arm may be adjusted to cause the contact points 34 and 35 to separate just at the proper point in the current wave production.

An auxiliary roller 43 is mounted upon a bell crank lever 44, this bell crank lever being pivotally mounted on the post 27. The depending arm 44 is adapted to be controlled by the engine governor. Thus when

the speed of the engine exceeds the limit for which the governor is set, the roller 43 is elevated to lift the actuating rod 22 clear of the operating arm 21, thus preventing the oscillation of the inductor and at the same time the actuation of the contacts 34 and 35.

While I have shown and described a preferred embodiment of my invention, it will be apparent to those skilled in the art that many modifications may be made without departing from the spirit thereof.

What I claim as new and desire to secure by Letters Patent is:

1. In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

2. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with

the yoke, and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

4. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

5. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and an impact member fixed relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

6. In a device of the class described, a field magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the

field magnet, a yoke mounted upon said shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven
5 member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an

ignition spark in the combustion chamber of the engine.

In witness whereof, I hereunto subscribe my name this 26th day of October, A. D. 1910.

JOHN LEWIS MILTON.

Witnesses:

ALEXANDER KISKADDEN,
EUGENIA K. ADAMS.

E. PODLEŠÁK.

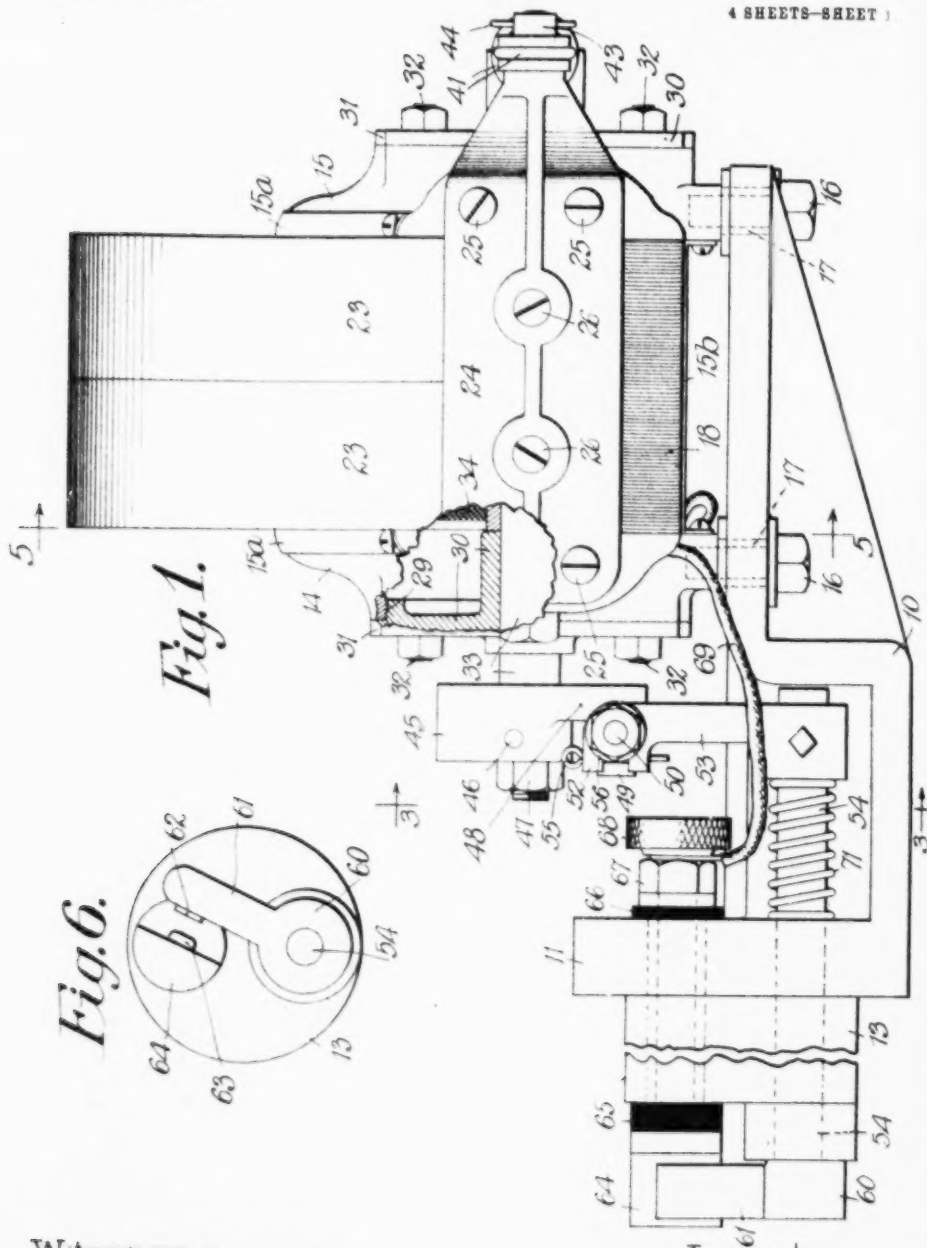
MAGNETO MACHINE.

APPLICATION FILED JULY 21, 1911.

1,098,052.

Patented May 26, 1914.

4 SHEETS—SHEET 1



Witnesses

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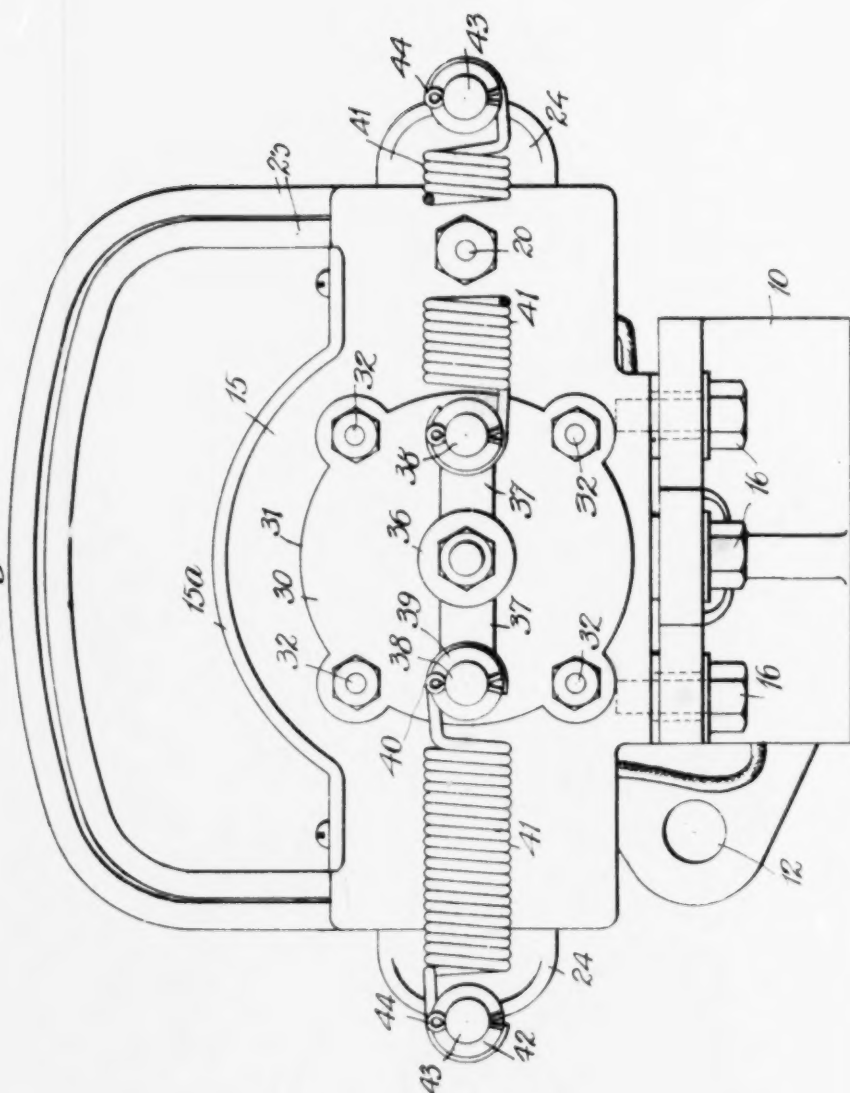
E. PODLEŠÁK.
MAGNETO MACHINE.
APPLICATION FILED JULY 21, 1911.

1,098,052.

Patented May 26, 1914

4 SHEETS—SHEET 2.

Fig. 2.



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APPLICATION FILED JULY 21, 1911.

1.098,052

Patented May 26, 1914.

4 SHEETS-SHEET 3.

Fig. 3.

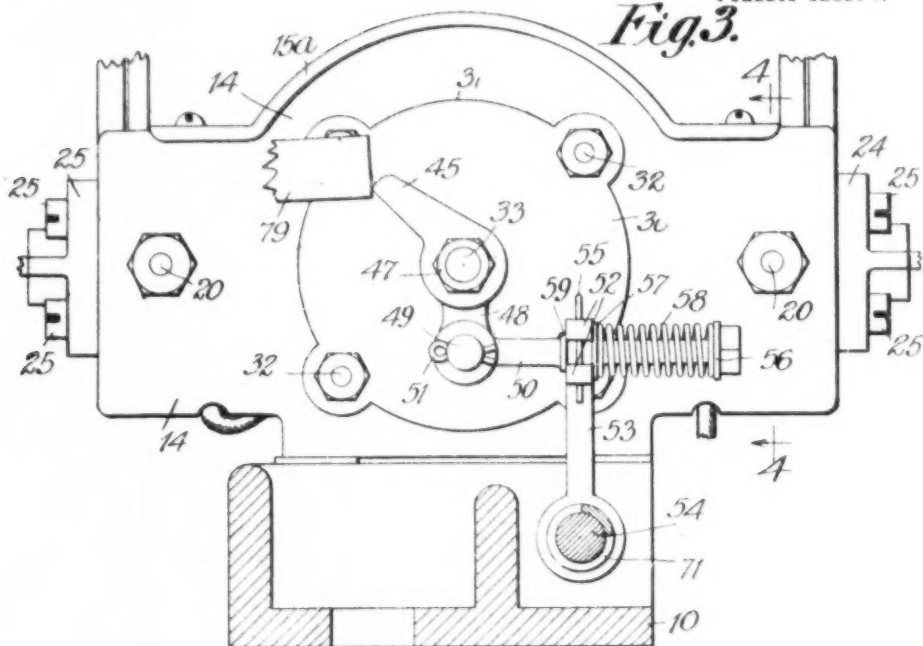
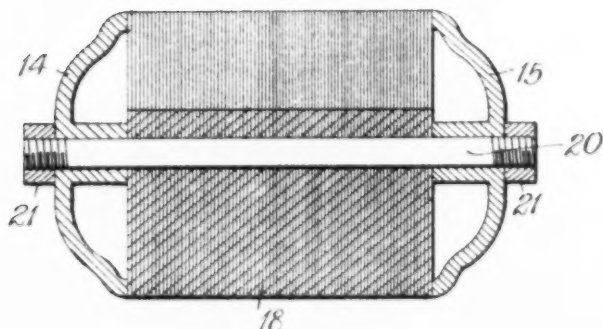


Fig. 4.



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APPLICATION FILED JULY 21, 1911.

1,098,052.

Patented May 26, 1914

4 SHEETS—SHEET 4.

Fig. 7.

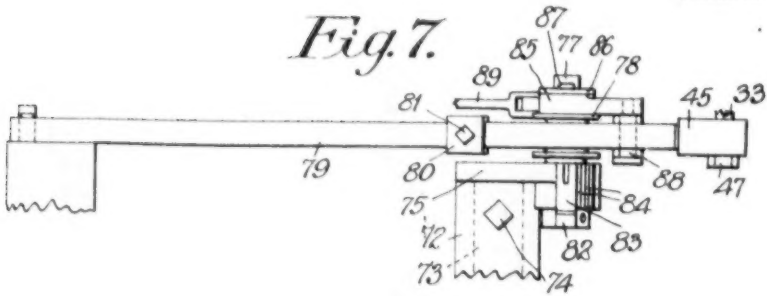


Fig. 5.

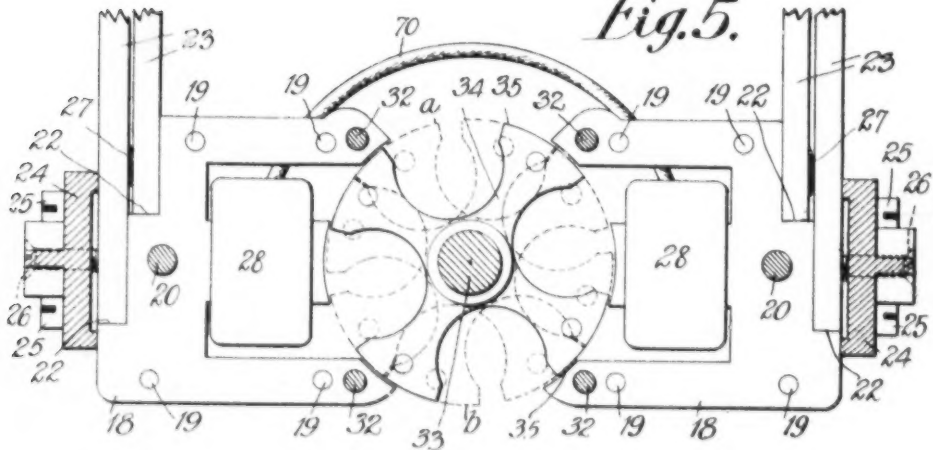


Fig. 9.

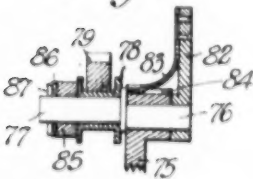
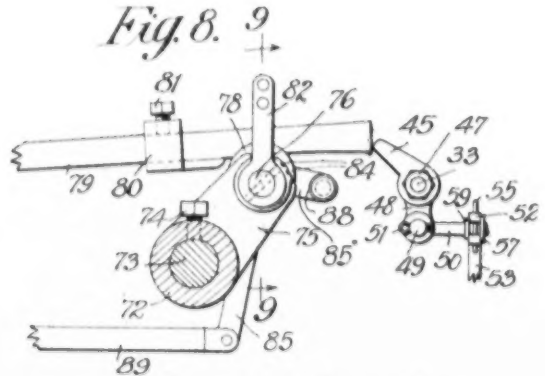


Fig. 8.



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UNITED STATES PATENT OFFICE.

881

EMIL PODLEŠÁK, OF TIFFIN, OHIO.

MAGNETO-MACHINE.

998,052.

Specification of Letters Patent

Patented May 26, 1914.

Application filed July 21, 1911. Serial No. 633,732.

all whom it may concern:

Be it known that I, EMIL PODLEŠÁK, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Magneto-Machines, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to magneto machines and it contemplates a generally improved machine. Its object is to produce a magneto machine which will be substantially less expensive than devices of the prior art, which will be of more simple and reliable construction and which will be more durable and more efficient.

To the ends above noted I have invented various features of construction and arrangement, new in themselves and influentially related, touching not only upon the magneto itself, but also upon the sparking mechanism, for association with an internal combustion engine, to which it is peculiarly adapted.

Specifically, therefore, my device is a magneto machine for ignition purposes and various features of construction to which I have referred will be found to be consistent with this use. In addition to these various features of construction and arrangement, I provide for an entirely new manner of operation which could be carried out by mechanisms other than those herein specifically shown. It will be seen, however, that one of the more specific of the appended drawings bring out the detailed construction in this operation, which is particularly novel and advantageous in this respect.

The various features of my invention are embodied in the magneto machine illustrated in the accompanying drawings, in which—

Figure 1 is a side elevational view thereof; Fig. 2 is an end elevational view thereof; Fig. 3 is a partial view taken on the plane of the line 3—3 of Fig. 1 and looking in the direction indicated by the arrows; Fig. 4 is a partial sectional view taken on the plane of the line 4—4 of Fig. 3 and looking in the direction indicated by the arrows; Fig. 5 is a partial sectional view taken on the plane of the line 5—5 of Fig. 1 and looking in the direction indicated by the arrows; Fig. 6 is

an isolated face view of the spark gap mechanism; Fig. 7 is a plan view of the actuating mechanism; Fig. 8 is a fragmentary elevational view of some of the parts shown in Fig. 7, some parts being shown in section; and Fig. 9 is a sectional view taken on the plane of the line 9—9 of Fig. 8 and looking in the direction indicated by the arrows.

This type of machine is adapted to be bolted directly upon the engine casting. The various parts are carried upon a comparatively heavy supporting frame or shelf 10 which is provided with the upright flange 11 having openings 12 through which cap bolts may be passed into the engine casting. A cylindrical boss 13 extends forwardly from this upright flange and is adapted to fit in a corresponding opening in the engine casting so that the spark gap terminals which are carried thereby and which will be described later may be disposed directly in the engine cylinder.

Two non-magnetic supporting side plates 14, 15, upon which various other parts of the magneto are carried, are bolted to the frame or shelf 10 by means of cap bolts 16, 16 passing through enlarged openings 17, 17 in the frame and into the bottom of the side plates as illustrated in Figs. 1 and 2. The utility of these enlarged openings will appear presently. There are preferably three of these cap bolts and the three supporting points thus determine the supporting plane and a rigid arrangement is secured. Between these supporting side plates, at each end thereof, a laminated pole piece 18 is clamped, these pole pieces comprising laminations riveted together at 19, 19. As shown in Figs. 4 and 5, bolts 20, 20 pass through the pole pieces and through the side plates and at the ends are provided with nuts 21, 21 so as to secure a mechanically resistant arrangement.

The outer end of each pole piece 18 is stepped as indicated at 22, 22 for the reception of permanent horse shoe magnets 23, 23 which thus pass from one pole piece over to the other as shown in Figs. 1 and 2. These horse shoe magnets are held firmly upon the pole pieces by means of the end plates 24, 24 which are secured to the ends of the side plates 14 and 15 by means of bolts 25, 25. As to the magnets, there are two sets of two, the inner magnets resting upon the

upper step 22 and the outer magnets resting upon the lower step 22. Set screws 26, 26, one for each side of each pair of magnets, have threaded engagement with the end plates 24, 24 and are screwed in to abut against the magnets to clamp them firmly in place. Dish springs 27, 27 are interposed between the magnets of each pair, near each end, as illustrated in Fig. 5, in order to transmit the clamping action.

The members 18, 18 are tri-polar and the middle polar extension of each of them is provided with a generating coil 28, 28. Each of the side plates 14 and 15 has a central opening 29, these openings alining upon an axis disposed midway between the pole faces, as will be pointed out presently. In each of the openings 29 a non-magnetic collar 30 is secured, the flange 31 of this clamp being secured to the face of the side plate by means of bolts 32, 32. These bolts, as shown in Fig. 5, extend through the outside polar extensions of the pole pieces in order to assist in clamping the laminations together. The collars 30, 30 form bearings for the rotor shaft 33 upon which the rotor 34, having four faces 35, 35, is secured. The over-all periphery of the rotor is cylindrical and this form corresponds with the cylindrical internal faces of the polar projections, all as illustrated in Fig. 5. The faces of the rotor are approximately the same width as the faces of the middle polar projections and are considerably greater in width than the outside polar faces. Furthermore, the rotor faces are broad enough to span the distance between the middle polar faces and the outside polar faces, but not wide enough to span the distance between the outside polar faces on one side and those on the other. A thin brass plate 15^a is secured across the top of the side plates and a thin brass plate 15^b is secured across the bottom of the side plates in order to inclose and protect the rotor.

On the outside, beyond the side plate 15, the rotor shaft 33 has rigidly secured thereto a hub 36 which is provided with the oppositely extending arms 37, 37. Each of these arms is provided at its end with a portion 38 turned outwardly at right angles and provided with a spool 39 slipped thereon and retained in place by means of a cotter pin 40. One end of a coiled spring 41 is wound about each spool 39 and the other end of each spring is wound about a spool 42 mounted upon a stud 43 extending from the corresponding end plate 24, a cotter pin 44 being provided to hold this latter spool in place. The tendency of the springs 41, 41 is to keep the arms 37, 37 in a horizontal position, as shown in Fig. 2, and when they are in this position the rotor is in the position shown in full lines in Fig. 5. Upon the opposite end of the rotor shaft 33, which

is slightly reduced, a finger 45, preferably of tool steel, is secured by means of a cotter pin 46 and a nut 47. This finger, as will be described later, is adapted to be engaged intermittently by a push rod operating from the engine shaft. This finger is provided with the downward extension 48 which is provided with a small stud 49 to which the end of a small connecting rod 50 is pivotally attached, the rod being held in place by means of a cotter pin 51. This rod extends to the right (Fig. 3) where it passes between the tangs of the bifurcated ends 52 of a swinging lever 53 rigidly secured upon a shaft 54, this shaft being journaled in the boss 13, as indicated in Fig. 1. A cotter pin 55 retains the connecting rod between the parts 52, 52. The connecting rod extends considerably to the right of the lever 53 and at its end is provided with a shoulder or nut 56 between which and the lever washer 57 thereon the coiled spring 58, encircling it, is disposed. It is clear that the expansive nature of this spring will normally tend to hold the washer 57 against the right side of the operating lever 53. The function of this spring will be pointed out later. The connecting rod 50 is provided with a small shoulder 59 on the left of the oscillating lever and the function of this shoulder will be pointed out later when the operation is described.

The shaft 54 extends forwardly beyond the boss 13 and it is there provided with a hub 60 rigidly secured thereto and having an arm 61. This arm carries the contact piece 62 which coöperates with the stationary contact piece 63 carried upon a stud 64 which is effectively insulated from the boss 13 by the flange 11 by means of the insulating parts 65, 65. The stud 64 extends through the boss 13 and the flange 11 and it is there provided with a nut 67 and with a binding screw 68. It is clear that angular movement of the arm 61 will result in the making or breaking of a circuit between the points 62 and 63. The arm 61 is grounded to the machine and the other contact is insulated therefrom. A suitable insulated conductor 69 connects the binding post 68 and one of the coils 28 while the two coils are connected together by means of a conductor 70. The free terminal of the second coil 28 is grounded to the machine and this completes the circuit for low tension ignition.

The arm 61 is so disposed upon the shaft 54 that when the oscillating lever 53 is in its normal position, that is, when the rotor is in the position shown in full lines in Fig. 5, the contacts 62 and 63 are separated as indicated in Fig. 6. The purpose of this arrangement will be pointed out later when the operation is described. The shaft 54 is capable of a slight longitudinal movement conveniently due to the play between the

mechanical connections involved, but it is held at one extreme of its movement by means of a coiled spring 71 which surrounds it between the hub of the lever 53 and the flange 11. When it is desired to clean the contacts 62 and 63 they may be brought into engagement and the shaft 54 moved back and forth to rub them together.

Referring to Figs. 7, 8 and 9, it will be seen that a supporting stud 72 is provided and this stud may extend from any suitable part of the engine frame. This stud is provided with a central bore in which a shaft 73 is held in any adjusted position by means of a set screw 74. This shaft 73 carries an arm 75 which, in turn, carries a rotatable stud 76. This stud has a forward extension 77, the axis of which is parallel to but eccentric from the axis of the stud itself, for a purpose which will be pointed out presently, and upon this extension a roller 78 is disposed. A push rod 79 rides upon the roller 78 and, as broadly indicated in Fig. 7, is mechanically connected in some way with the engine shaft. Thus the push rod 79 is guided to abut against the finger 45, as indicated in Fig. 8, and for each reciprocation thereof it moves the finger over to impart a certain amount of oscillation to the rotor. This action is called "cocking the magneto." The push rod is provided with a cam piece 80, secured in any adjusted position by means of the set screw 81 and this cam piece is arranged to engage the roller at the proper moment to raise the push rod and to release the finger 45 so that the rotor may fly back under the influence of the springs 41, 41. As the rotor returns in this manner the magnetic flux is changed so that current is generated in the windings 28, 28 and this causes a spark to pass between the contacts 62 and 63, as will be pointed out more fully later. It will appear that the time at which the finger 45 is released from the push rod 79 is very important and initial adjustment in this respect is secured by giving the arm 75 the proper position and by tightening down the set screw 74 after this position has been attained. It is, however, desirable frequently to change the timing, either to retard or advance the spark, during the operation of the engine, and in order that this may take place I provide an actuating lever 82 upon the stud 76. In turning the stud by means of this lever the roller 78 is raised or lowered because of the eccentric position of the shaft 77 relative to the stud 76, and in this way the time of the release of the finger 45 may be varied. The lever 82 is provided with a spring 83 which is adapted to snap down into any one of the notches 84, 84 on the end of the arm 75 so that the arrangement may be held properly in any adjusted position. In temporarily adjusting the lever 82 the tension of this spring is easily over-

come so that it may snap into the next notch either one way or the other. Also upon the part 77 I mount a bell crank lever 85, held in place by means of a washer 86 and a cotter pin 87, and this bell crank lever is provided upon one arm with a roller 88 which is adapted to engage the under side of the push rod 79. The other arm of this bell crank lever is connected by means of a suitable link 89 with the governing mechanism of the engine and the arrangement is such that when the speed becomes excessive the bell crank lever will be moved in a counter-clockwise direction (Fig. 8) and the push rod 79 will be lifted to such an extent that it can not engage the finger 45 to cock the magneto. When the speed has decreased the bell crank lever turns in the opposite direction and the push rod may again drop down into operative relation with the magneto.

As before stated, the spark contacts 62 and 63 are normally separated from each other. This is important since if for any reason the magneto gives out it is desirable that a battery circuit be connected to provide the spark. If the contacts are normally closed there will be a very large strain upon the batteries and even if storage batteries were used it would result in the consummation of a larger current than is necessary to produce the spark. Another advantage is gained in this respect and that is the elimination or avoidance of most or all of the reverse current. If these contacts are open during the proper part of the cocking of the magneto, there will be no current flowing which will tend to perpetuate itself and to have a counter effect upon the current which is to produce the spark when the rotor is released. It will be seen that in the normal position the rotor barely overlaps the middle polar projections and it is a fact that the rotor faces have left the middle polar projections by a considerable distance before the contacts 62 and 63 come together. Since the middle projections are the only ones which carry windings any effect between the other projections would not be noticeable in this respect and there is no appreciable counter effect, if any. In cocking the engine the rotor is brought over into approximately the dotted position *a* and upon the fly back it probably reaches the position shown by the dotted lines *b*. With an arrangement of this kind the spark is secured upon the rising flux, and this is desirable since, as has been pointed out, the relation between the rotor faces and the pole faces is such as to bear a peculiarly advantageous relation to the position and operation of the spark terminals.

It will be seen that when the rotor is cocked after a considerable movement, certainly after the rotor faces have left the middle polar faces, the contacts will come

together and the further movement of the finger will be taken up by the spring 58. Upon the release of the finger there will be a short snappy action and the flange 59 on the connecting rod 50 will engage the lever 53 and will strike it a sharp hammer blow, thus suddenly opening the contacts at the proper point in the current wave which is simultaneously generated in the magneto coils. If, however, it be desired to utilize the decreasing flux for the spark, the inductor is so cocked as to bring two opposite arms of the rotor approximately opposite the wound polar projections before releasing. In this arrangement it is quite essential that the contacts be kept separated until the flux through the wound polar projections has attained a substantially fixed intensity, that is, an intensity which is not varying. The operation of the spark contact terminals should be as above described.

The arrangement between the end plates, the side plates, the magnets and the pole pieces is important since a very rigid structure is secured. The parts are few and the connecting points are few. The rotor shaft finds bearing at both ends and in this way the proper relation to the poles is constantly maintained. The fact that the push finger can be made independently of the other parts is important since it can then be made of tool steel and can be readily replaced without interfering with any other of the mechanisms. This finger must withstand a considerable amount of wear and tear and such an arrangement as I propose is particularly advantageous.

It will be remembered that the side plates which support a number of parts are adjustably mounted upon the supporting frame or shelf, due to the enlarged openings through which the cap holes pass. The mechanical arrangement between the push finger and the sparking mechanism is such that great accuracy is not required and it is not necessary, therefore, to finish the engaging faces of the shelf and the side plates. Approximate mounting is ample and adjustment is easily secured by shifting the side plates about and then tightening the screws as desired.

The parts are easily dismantled. For instance, the cotter pin 55, if withdrawn, will release the entire magneto arrangement from the sparking arrangement and the other parts are equally easy of access for the purposes of inspection and repair.

No special arrangement is required for supporting the springs which operate the oscillating rotor. The springs are conveniently supported from the side plates which perform other useful functions and in this way the number of parts is kept at a minimum. These plates hold the U-shaped magnets in proper position and in such position

that the windings and polar projections do not come very close to the intermediate parts of the magnets. In other words, a better field is the result since leakages are almost entirely eliminated.

The means for timing the spark is advantageous. The operating means is held firmly in any position, regardless of where the spark comes in, even though temporary adjustment, during the running of the machine, is available.

I claim as new and desire to secure by Letters Patent:

1. In a magneto machine, pole pieces, horse-shoe magnets spanning said pole pieces, side plates between which said pole pieces are firmly clamped, end plates bolted to the ends of said side plates, a shaft mounted in said side plates, a rotor on said shaft, an arm on said rotor, and a spring extending from said arm to an extension on the adjacent end plate.

2. In a magneto machine, pole pieces, horse-shoe magnets spanning said pole pieces, side plates between which said pole pieces are firmly clamped, end plates bolted to the ends of said side plates, a shaft mounted in said side plates, a rotor on said shaft, oppositely extending arms on said shaft, extensions on said end plates, and a spring extending between each extension and the adjacent arm.

3. In a magneto machine, pole pieces, horse-shoe magnets spanning said pole pieces, side plates between which said pole pieces are firmly clamped, end plates bolted to the ends of said side plates, set screws passing through said end plates and abutting against said magnets to hold them firmly in engagement with said pole pieces, a shaft mounted in said side plates, a rotor on said shaft, an arm on said shaft, and a spring extending from said arm to an extension on the adjacent end plate.

4. In combination, a pair of tri-polar pole pieces, windings on the middle portion thereof, a four-faced rotor mounted to oscillate between said pole pieces, each of said rotor faces being of a width substantially the same as the width of the middle pole piece and being wide enough to span the distances between the middle pole pieces and the outside pole pieces but not great enough to span the distances between opposite pole pieces, contact mechanism mechanically connected with said rotor, the contacts of said mechanism being normally separated and the normal position of the rotor being such that the rotor faces only slightly overlap the middle pole pieces carrying the windings, and means for operating the rotor to cock it in a direction receding from the middle pole pieces and simultaneously closing said contacts together.

5. In combination, pole pieces, a rotor and

sociated therewith, means for oscillating said rotor, a stationary contact member, an oscillating shaft carrying a contact member for cooperation with said stationary contact member, an operating lever for said oscillating shaft, resilient connections between one side of said operating lever and said rotor, and positive connection between the other side of said operating lever and said rotor.

6. In combination, a pair of pole pieces, a rotor mounted upon a shaft, means for cocking said rotor; spring means for suddenly bringing said rotor back upon its release, an arm upon the rotor shaft, an oscillating shaft, a lever on said oscillating shaft, a connecting rod extending from said arm through an opening in said lever, a head on said connecting rod, a spring disposed between said head and one side of said lever, a collar on the connecting rod adapted to engage the other side of said lever, a contact piece carried by said oscillating shaft, and a stationary contact piece associated therewith, said contacts being normally separated but being brought together by part of the cocking action transmitted through said spring and being suddenly

separated by the engagement of said collar with said lever.

7. In combination, a pair of pole pieces, a rotor mounted upon a shaft, means for cocking said rotor, spring means for suddenly bringing said rotor back upon its release, an arm upon the rotor shaft, an oscillating shaft, a lever on said oscillating shaft, a connecting rod extending from said arm through the bifurcated end of said lever, a head on said connecting rod, a spring disposed between said head and one side of said lever, a collar on the connecting rod adapted to engage the other side of said lever, a contact piece carried by said oscillating shaft, and a stationary contact piece associated therewith, said contacts being normally separated but being brought together by part of the cocking action transmitted through said spring and being suddenly separated by the engagement of said collar with said lever.

In witness whereof, I hereunto subscribe my name this 18th day of July, 1911.

EMIL PODLEŠÁK.

Witnesses:

LEONARD W. NOVANDER,
LEONARD E. BOGUE.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

Fig. 1.

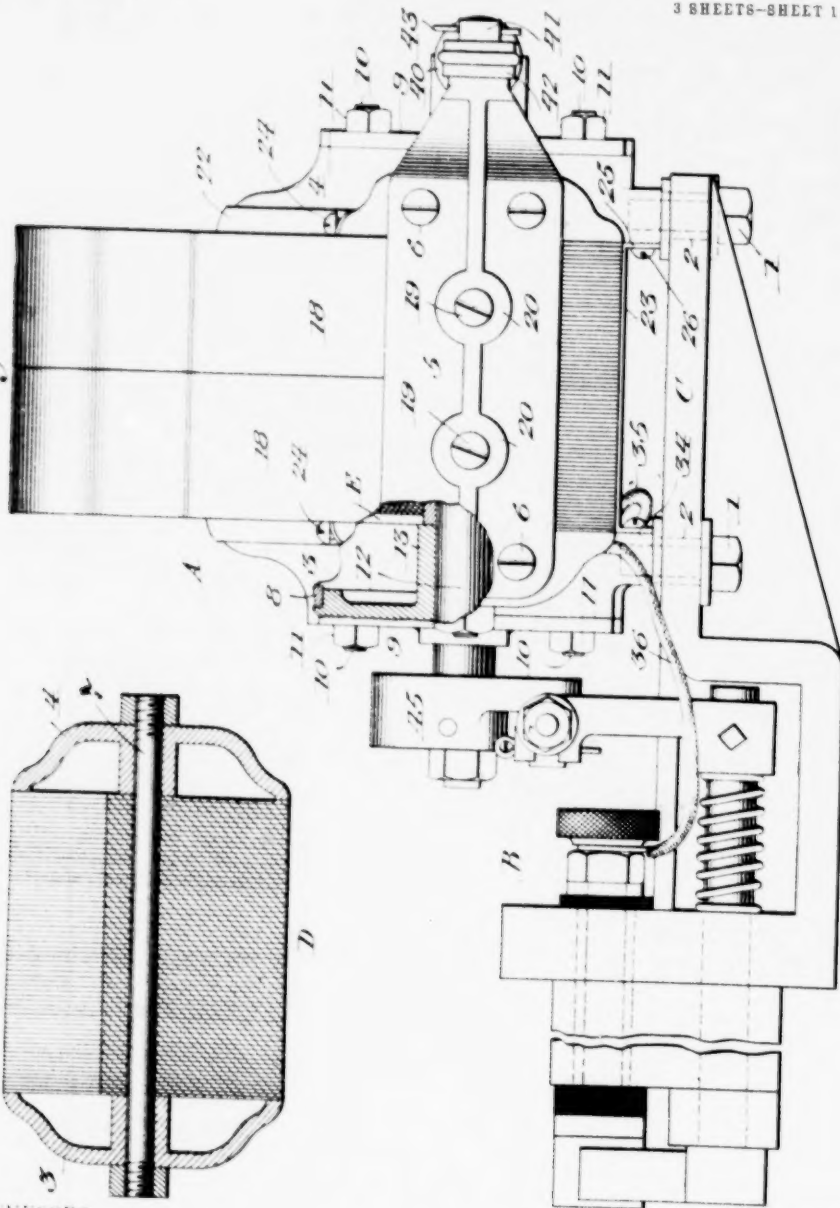
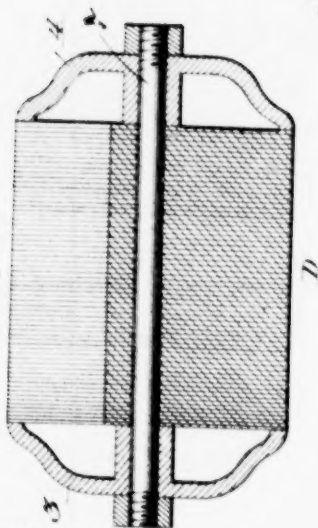


Fig. 4.



WITNESSES

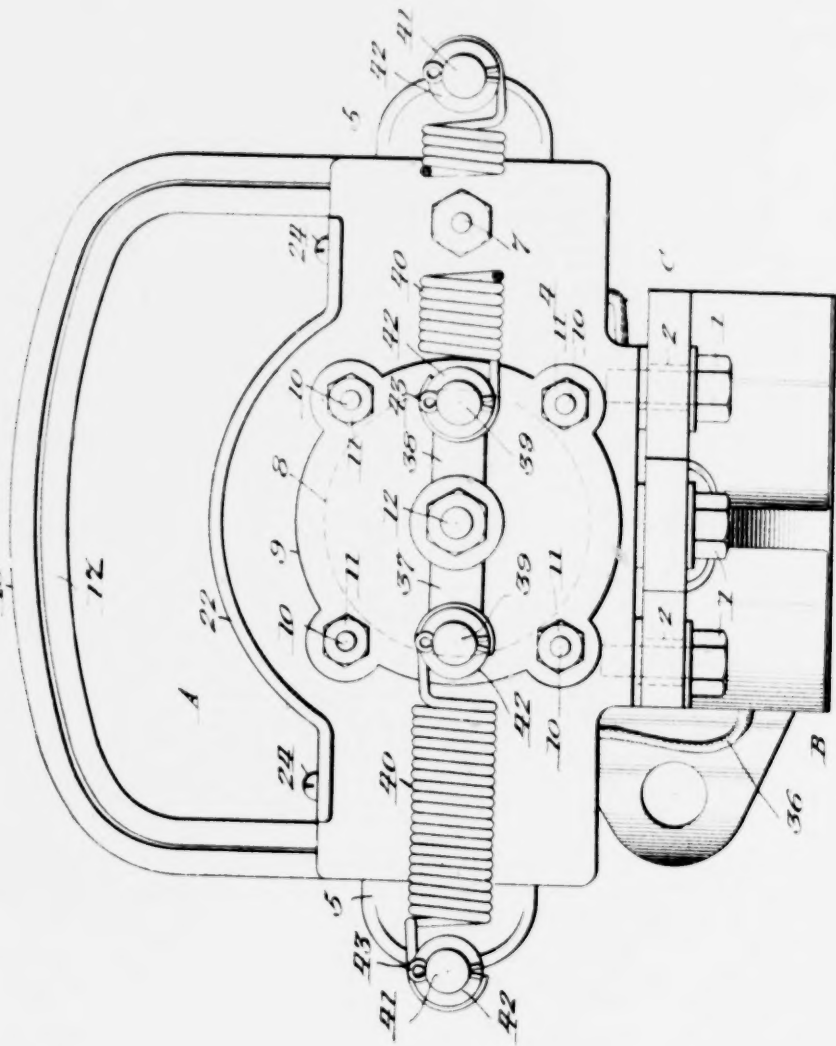
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Fig. 2.



WITNESSES

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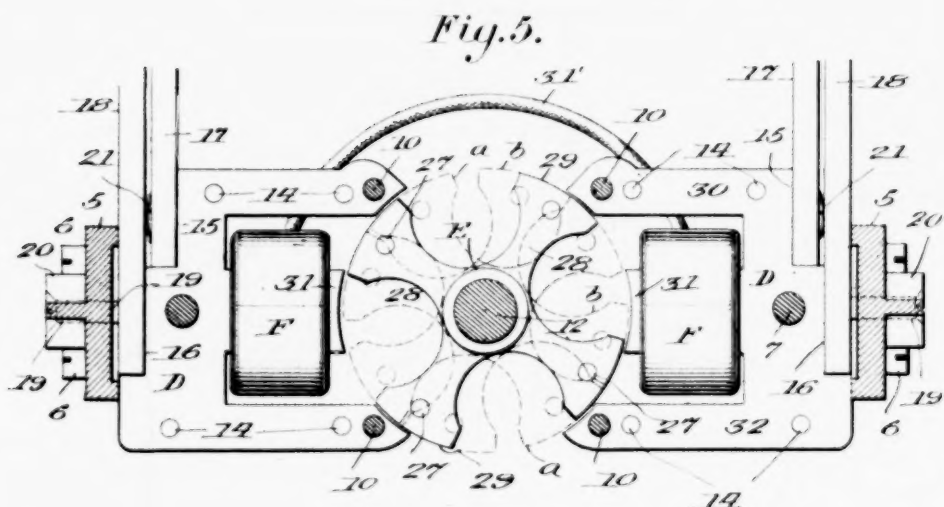
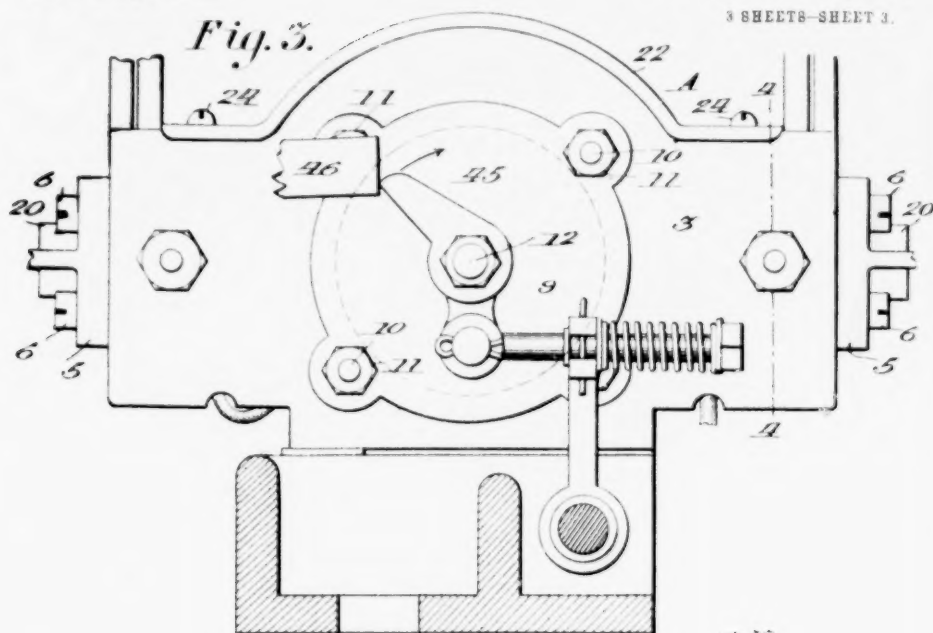
By Chas. B. Bingham
Attorney

E. PODLESÁK.
INDUCTOR ALTERNATOR.
APPLICATION FILED DEC. 27, 1911.

1,098,754.

Patented June 2, 1914

3 SHEETS—SHEET 3.



WITNESSES

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Fig. 6. (21)

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Emil Podlesák

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UNITED STATES PATENT OFFICE.

EMIL PODLEŠÁK, OF TIFFIN, OHIO.

INDUCTOR-ALTERNATOR.

1,098,754.

Specification of Letters Patent.

Patented June 2, 1914.

Original application filed July 21, 1911, Serial No. 639,738. Divided and this application filed December 27, 1911. Serial No. 668,153.

To all whom it may concern:

Be it known that I, EMIL PODLEŠÁK, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Inductor-Alternators, of which the following is a specification.

This application is a division of my application for Letters Patent of the United States, Serial No. 639,738, and is made at the requirement of the United States Patent Office.

The invention relates to current generators of the induction alternator type especially designed for use in connection with gas engine igniters of the mechanical make and break type.

The general object of the invention is to improve and simplify the construction and operation of machines of this character so as to be comparatively inexpensive to manufacture, of durable and substantial design, and having a high efficiency in connection with sparking devices when the size and weight of the machine is considered.

Among the specific objects, the invention has to provide an improved arrangement of pole pieces and inductor or rotor whereby magnetic flux variations can be effectively produced with respect to the generating windings for causing the generation of a sparking current of great intensity, the pole pieces being of the trifurcated type with the middle polar projection wound, and the inductor is of the cruciform type to cooperate with the polar projections to vary the paths of the magnetic flux with respect to the winding.

Another object of the invention is to provide a durable, substantial and simple frame structure for holding the pole pieces, rotor and magnets.

A further object is the employment of improved means for clamping the magnets to the pole pieces and yet obtain effective joints between them without great accuracy in the machining of the parts.

Another object is the employment of improved means for oscillating the rotor or inductor with respect to the polar pieces for producing the magnetic flux variations.

With these and other objects in view, as will appear as the description proceeds, the invention comprises the various novel fea-

tures of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one embodiment of the invention, Figure 1 is a side elevation of the machine shown in connection with the sparking device. Fig. 2 is a front view thereof. Fig. 3 is a fragmentary rear view of the machine with the igniter frame in section. Fig. 4 is a sectional view through one of the pole pieces and the side plates of the frame, the section being taken on line 4—4, Fig. 3. Fig. 5 is a partial sectional view of the machine taken transversely to the axis of the rotor and immediately to the front of the pole pieces. Fig. 6 is a perspective view of one of the bowed springs interposed between the extremity of the magnets for clamping the inner magnet against the extremity of the pole piece.

Similar reference characters are employed to designate corresponding parts throughout the views.

In Fig. 1, the current generator A is shown in connection with a make and break igniter B, for which the generator is especially designed, although it may be put to other service. The generator A is mounted on a base C which is a part of the frame of the igniter B, and the frame of the generator is attached to the base C by bolts 1 passing through openings 2 in the base C and screwing into the side plates 3 and 4 of the generator frame, the openings 2 being larger than the threaded shanks of the screws, so that the generator frame can be adjusted on the base in proper relation to the igniter B.

The frame of the generator is non-magnetic and comprises front and rear side plates 3 and 4 and end plates 5, which are fastened to the ends of the side plates by screws 6 so that the said plates form a rectangular frame for holding the pole pieces D, which are preferably laminated and are clamped between the side plates 3 and 4 by means of through bolts 7 adjacent the ends of the side plates. The center of each side plate has an opening 8 that is closed by a removable bearing plate 9 secured in place by bolts 10, said bolts passing from one side to the other and through the same, and

through the pole pieces so that these bolts 10 cooperate with the bolts 7 to hold the pole pieces firmly in place. By removing the nuts 11 of the bolts 10, the plates 9 can be taken off for permitting the rotor E to be taken out. The rotor is mounted on a shaft 12 which passes through internal bearing bosses 13 on the bearing plates 9.

The pole pieces D are trifurcated and made of approximately E-shaped steel stampings that are secured together by rivets 14, and these pole pieces are diametrically disposed with respect to the rotor E. The outer faces of the pole pieces are formed with upper and lower steps 15 and 16, which are spaced from the end plates 5 so as to provide recesses into which the ends of the inner and outer U-shaped magnets 17 and 18 extend, the said magnets being held against lateral displacement by means of the side plates 3 and 4 of the generator frame. The outer magnets 18 are clamped against the steps 16 by screws 19 that are threaded in bosses 20 on the end plates and bear at their inner ends on the extremities of the magnets 18. The extremities of the magnet 17 are held against the steps 15 of the pole pieces by the interposition between the magnets of bowed springs or equivalent resilient devices 21, as shown in Fig. 5. In this manner, the magnets are effectively held in place without their extremities being bored for the reception of screws or other fastenings and at the same time the magnets can be readily taken out. It will be seen that the magnets have a large area of contact with the pole pieces so that magnetic reluctance is reduced to a minimum.

Cooperating with the frame of the machine are top and bottom plates 22 and 23, respectively, the former being better shown in Figs. 2 and 3, and the latter in Fig. 1. The top plate is fastened by screws 24 to the side plates 3 and 4 of the machine frame, and the bottom plate 23 has its edges bent downwardly into flanges 25 through which pass screws or other fastenings 26 that are threaded in the side plates of the machine frame. Thus the side plates 3 and 4, end plates 5, and top and bottom plates 22 and 23 form a tight housing for the generator windings, pole pieces and rotor, so that none of these parts can be injured by the effects of the elements.

As clearly shown in Fig. 5, the rotor E is of cruciform shape in cross section, and it is preferably made of laminæ fastened together by rivets 27. The extremities of the arms 28 are enlarged to give comparatively wide faces 29 that cooperate with the extremities of the polar projections 30, 31 and 32. The polar projection 31 is shown with a polar face of greater area than the polar face of the outer projections 30 and 32, and the polar faces 29 of the rotor are

approximately the same as the middle projections in area. The generating windings F are located on the middle polar projections 31, and electro-motive force is generated therein by variations in the paths of magnetic flux through the polar projections and rotor, as will be more fully described hereinafter. These windings F are connected together by a wire 31', one winding being grounded on the frame of the machine at 34, Fig. 1, by a wire 35, and the other winding being connected with the igniter by a wire 36. The windings F are preferably of the formed type and are placed over the middle polar projections to which they are suitably secured. The bolts 10 pass through the outer polar projections so that they do not interfere with the removal or replacing of the windings when occasion requires.

The rotor is adapted to have an oscillatory movement so as to change the magnetic flux through the pole pieces, and hence with respect to the windings for generating a sparking current. On the front end of the rotor shaft 12 which extends forwardly from the front bearing plate are fastened oppositely-disposed crank arms 37 that carry studs 39 to which are respectively secured helical extension springs 40 which have their outer ends fastened to studs or extensions 41 on the end plates 5 of the generator frame, there being on the studs 39 and 41 spools 42 around which the ends of the springs are hooked. These spools are held in place on the studs by cotter pins or equivalent fastenings 43. The springs 40 are normally in axial alignment with each other and with the center lines of the crank arms 37 and 38, and the springs thus hold the rotor in a given position with respect to the pole pieces, such position being shown in the present instance by full lines in Fig. 5. When the rotor is turned, the springs 40 are placed under tension by their inner ends being carried around with the studs 39 as the rotor shaft is turned through a short arc. Upon the shaft being released, the springs contract and effect the return movement of the rotor, but by reason of the peculiar disposition of the springs, the rotor flies beyond its normal central position a short distance and re-bounds back. The means for moving the rotor in opposition to the tension of the springs 40 consists of a wipe arm 45 on the rear end of the rotor shaft, as shown in Figs. 1 and 3, said arm being engaged by a reciprocatory rod 46 or equivalent device, Fig. 3, which moves by a suitable part of the engine with which the generator and igniter are used, the movement being in timed relation with the cycle of the operation, so that the generator and sparking device will be actuated at the proper time. The actuator 46 moves to the right,

Fig. 3, to give a clockwise movement to the arm 45 of only a few degrees, and then upon the return of the actuator, the arm 45 quickly snaps back and allows the rotor to swing rapidly from one polar projection to another for changing the magnetic flux with respect to the generating windings F. More specifically, the rotor is moved from the full line position, Fig. 5, to the dotted line position *a*. This movement is more or less gradual, and as the arms of the rotor are now in line with the outer polar projections, the lines of force will pass through the latter from the positive pole piece through the rotor and outer polar projections of the negative pole pieces. After the rotor has been moved to cocked position, as indicated by the dotted lines *a*, the rotor is released and quickly returned by the springs 40 toward the normal position shown by full lines, but the rotor overtravels such position and reaches the position indicated approximately by the dotted lines *b*. The magnetic flux is now quickly concentrated through the middle polar projections 31, and hence the lines of force thread the generating windings F, and it is during this time that the electro-motive force is built up for producing the igniting current, the operating connections between the rotor and sparking device being such that the electrodes will separate when the current is at maximum intensity.

The details of the operating connections between the igniter and rotor need not here be described, as the same are fully set forth and claimed in the parent application, of which this is a division.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, is:—

1. The combination of a frame, a pole piece secured thereto and forming with the frame a recess, a magnet having one end fitted in the recess, and a clamping screw threaded in the frame and bearing against the magnet to clamp the same against the pole piece.

2. The combination of a frame, a pole piece secured therein and spaced from one end of the frame to form with the latter a recess, the wall of the recess formed by the

pole piece being stepped, and magnets having extremities extending into said recess and clamped against the stepped side of the pole piece.

3. The combination of a frame, a pole piece having steps, a plurality of magnets extending into the frame and each bearing on a step of the pole piece, a clamping means between the frame and one magnet, and a yielding element disposed between the magnets and held by said clamping means under tension to clamp the other magnet against the pole piece.

4. The combination of side and end plates, a pole piece secured between the side plates, a magnet having one end extending between the pole piece and one end plate, and means engaged with the end plate and magnet for clamping the latter against the pole piece.

5. The combination of side and end plates, a pole piece secured between the side plates, a magnet having one end extending between the pole piece and one end plate, a second magnet disposed under the first and held against lateral displacement by the side plates, and resilient means held between the magnets for maintaining the second magnet against the pole piece.

6. The combination of side and end plates secured together, a pole piece secured between the side plates and having a stepped surface next to the end plate, a short magnet and a long magnet extending between the end plate and pole piece and engaging the stepped surface thereof, said magnets being held against lateral displacement by the side plates, a clamping means acting between the end plate and long magnet for holding the latter against the pole piece, and a resilient means between the long and short magnet for holding the latter against the pole piece.

7. The combination of a pole piece, a plate fixed with respect thereto, a magnet having one end disposed between the plate and pole piece, and a clamping screw threaded in the plate and having its end bearing on the magnet for clamping the same against the pole piece.

8. The combination of a pole piece, a pair of magnets arranged one within the other, means for holding one magnet against the pole piece, and means disposed between the magnets for holding the other magnet against the pole piece.

9. The combination of a pair of oppositely-disposed pole pieces having their outer faces provided with upper and lower steps, a U-shaped magnet having its extremities clamped against the upper step of the pole pieces, a larger U-shaped magnet fitting over the first and clamped against the lower steps, means for clamping the larger magnets into contact with the pole pieces, and yielding means interposed be-

tween the extremities of the two magnets whereby the first-mentioned magnet is held against the pole pieces.

10 The combination of a frame having connected side and end plates, pole pieces secured within the frame, a rotor between the pole pieces, said side plates having openings of such size as to permit the rotor to pass axially therethrough, bearing plates secured at the openings, and an axle for the rotor journaled in the bearing plates.

11 The combination of a frame having connected side and end plates, pole pieces secured within the frame, a rotor between the pole pieces, said side plates having openings of such size as to permit the rotor to pass axially therethrough, bearing plates secured at the openings, an axle for the rotor journaled in the bearing plates, and through bolts passing through the bearing and side plates and through the pole pieces.

12 The combination of pole pieces, side plates, bolts passing through the side plates and pole pieces, end plates bolted to the ends of the side plates, horseshoe magnets spanning the pole pieces and having their ends disposed between the end plates and pole pieces and also between the side plates, and means on the end plates for clamping the magnets against the pole pieces.

13 The combination of pole pieces having inner and outer polar projections, side plates having openings, a rotor disposed between the pole pieces and removable through the openings of the side plates, bearing plates fitted to the openings, and bolts passing through the bearing plates and outer projections of the pole pieces.

14 The combination of pole pieces having inner and outer polar projections, side plates having openings, a rotor disposed between the pole pieces and removable through the openings of the side plates, bearing plates fitted to the openings, bolts passing through the bearing plates and outer projections of the pole pieces, and formed windings fitted to the inner polar projections of the pole pieces.

15 The combination of side plates, pole

pieces secured between the side plates, a rotor between the pole pieces, magnets connected with the pole pieces, end plates fastened to the side plates and cooperating therewith for holding the magnets in place, said end plates having extensions, crank arms connected with the rotor, and springs connected with the crank arms and with the extensions of the end plates.

16 The combination of pole pieces, magnets, end plates for clamping the magnets to the pole pieces, said end plates having extensions, a rotor disposed between the pole pieces, crank arms connected with the rotor, and springs connected with the said crank arms and the extensions of the end plates for normally holding the rotor in a given position with respect to the pole pieces.

17 The combination of side plates, pole pieces secured between the same, windings thereon, end plates secured to the side plates, magnets clamped between the end plates and pole pieces, a rotor rotatably mounted between the pole pieces and supported by the side plates, a top plate fastened to the side plates and extending between the extremities of the magnets, and a bottom plate disposed under the pole pieces and secured to the side plates.

18 The combination of a supporting base, side plates secured thereto, pole pieces disposed between the side plates, windings thereon, a rotor between the pole pieces and supported by the side plates, U-shaped magnets having their extremities clamped to the pole pieces, a top plate disposed under the magnets and secured to the side plates, and a bottom plate disposed under the pole pieces and above the said base and secured to the side plates, said top and bottom plates cooperating with the side plates to form a housing for the rotor and windings.

In testimony whereof I affix my signature in presence of two witnesses.

EMIL PODLEŠÁK.

Witnesses:

JENNIE H. FIEGE,
HAL W. MICHAELS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

UNITED STATES PATENT OFFICE.

EMIL PODLESAK, OF TIFFIN, OHIO.

IGNITION DEVICE FOR EXPLOSIVE-ENGINES

1,401,956.

Specification of Letters Patent.

Patented June 30, 1914.

Application filed November 29, 1912. Serial No. 734,143.

To all whom it may concern:

Be it known that I, EMIL PODLESAK, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Ignition Devices for Explosive-Engines, of which the following is a specification.

This invention relates to a combined make and break igniter and magneto of the type described in my application Serial No. 639,738, filed July 21, 1911, wherein the rotor is operatively related to the movable electrode of the igniter to produce an igniting spark as the rotor causes an electric impulse to be generated in the windings, the rotor being moved in one direction by an actuator operating in timed relation to the piston of the engine and returned quickly by spring action to normal position when released from such actuator, whereby the rotor causes a rapid change in the magnetic flux through the energizing windings of the generator and a consequent flow of the igniting current.

The principal object of the present invention is the provision of a device in the form of an attachment for such combined igniters and generators, whereby the rotor can be manually operated to produce an electric impulse for the igniting spark so that the engine can be started "on the spark" or without the necessity of cranking. This is especially advantageous in large engines where starting by cranking is practically impossible. Small engines equipped with the combined igniter and generator described do not need this manual starting device as the generator will operate with the engine during cranking, no matter how slowly the cranking takes place, since the sparking current is generated by the return of the rotor under the influence of its springs when the rotor is released from the actuating element that moves synchronously with the crank shaft during the cranking. In the case of large engines, however, the starting is accomplished by applying a charge of explosive mixture to the cylinder when the piston is in the right position for starting and then operating the rotor actuating device by hand, such device serving to engage some part connected with the rotor so as to move the latter to "cocked" position, and at the same time place the return springs for the rotor under tension, and while in such

"cocked" position, the starting device is released to permit the rotor to rapidly return under the contraction of its springs and thereby cause the igniting current to be generated in the winding, the movable electrode of the igniter being, of course, operated by the rotor, as in normal operation, so that the spark will be produced to ignite the charge in the cylinder.

Another object of the invention is to so construct the magneto operating or starting device that the same can be used as a gage whereby to hold the rotor in its proper "cocked" position so that the actuating means for the rotor can be set to oscillate the rotor through the proper angular movement and release rotor at the proper instant. This is of particular importance, as heretofore there has been no means of accurately adjusting the actuator for the rotor, general directions being given by the manufacturer for the user to set the actuator to give the rotor an angular movement of a certain number of degrees. Without proper gaging means, it is difficult to obtain an adjustment to give the rotor the required number of degrees, and as a result, when the rotor is not given the proper angular movement, a current of sufficient strength cannot be generated, so that less power is obtained from the engine and starting is difficult, whereas when too great an angular movement is given to the rotor, due to improper set of the actuator, undue strain is placed on the parts so that excessive wear results.

With these and other objects in view, as will appear as the description proceeds, the invention comprises the various novel features of construction and arrangement of parts which will be more fully described hereinafter and set forth with particularity in the claims appended hereto.

In the accompanying drawings, which illustrate one embodiment of the invention, Figure 1 is a side elevation of the apparatus showing the use of the starting and gaging device in position for gaging the set of the actuator with the rotor in "cocked" position. Fig. 2 is a detail plan view showing the starting and gaging device in its relation to the spring-actuating means for the rotor. Fig. 3 is a side view of the starting and gaging lever showing its relation to the crank arm of the rotor. Fig. 4 is a sectional view of the device showing the means for actuating the rotor to "cocked" position.

and the relation of the rotor shaft to the movable electrode.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawing, 1 and 2 designate the permanent magnets of the generator, and 2^a and 2^b the pole pieces having generating windings 2^c and 2^d, respectively, there being mounted between the pole pieces a cruciform rotor 2^e. The rotor is mounted on a shaft 17 which is journaled in end plates 3 which form part of the frame of the magneto. On one end of the shaft 17 is fastened a bar forming the oppositely-disposed crank arms 14 which are provided with pivot pins 16 that carry spools 12 to which the inner ends of the rotor returning springs 13 are connected, the outer ends of the springs being hooked over spools 12 on the pivot posts or pins 11. The springs 13 and arms 14 normally lie in a straight line passing through the pivot posts 11 and rotor shaft 17, and when the rotor is moved to "cocked" position, the crank arms 14 move with the rotor and place the springs 13 under tension by expansion, as shown in Fig. 1. On the end of the shaft 17 opposite from the crank arms 14 is a trip finger 39 and a hammer arm 44. Adapted to engage with the trip finger 39 is a push rod or actuator 28 which is connected by a wrist pin 27 with a disk 25 fastened to a shaft 26 which rotates with the crank shaft of the engine. The push rod 28 is supported at a point intermediate its ends by a grooved roller 32 journaled on the pin 31 which is carried by an arm 30, such arm being adjustably connected by a bolt 30^a to a lug 39 on the frame of the device. This roller 32 forms a fulcrum on which the push rod has a rocking movement simultaneously with its back and forth longitudinal movement and the tip or free end of the rod 28 is adapted to engage the trip finger 39 to move the rotor to "cocked" position and then to slip off the trip finger so that the rotor can snap back to normal position. In order to obtain the proper adjustment of the actuator or push rod 28 so that the trip finger will be released at the proper moment, the roller-carrying arm 30 can be swung up or down about the bolt 30^a as a center, and furthermore the connection of the rod 28 with the rotating element 25 can be adjusted by moving the rod 28 into or out of the socket piece 20 and clamped in the right position by the set screw 21.

The igniter is of the usual construction and comprises a frame body P which has stud holes 34 for clamping the body to the engine cylinder. On the body P of the igniter is an extension E which is provided with a shelf S on which the generator is mounted. The cylindrical body portion B

enters the usual opening in the engine cylinder for the igniter. In this body portion B are fixed and movable electrodes e and e' , the latter having an arm e'' that carries a sparking point e'' adapted to engage the sparking point e' on the fixed electrode, the said sparking points being, of course, on the inner ends of the electrodes so as to ignite the explosive charges in the engine cylinder. On the outer end of the movable electrode e' is an arm 43 which carries an anvil member in the form of a screw 45 so positioned as to be struck by the hammer arm 44, the screw 45 being adjusted with respect to the hammer arm to obtain the proper results. The movable electrode is provided with a spring or equivalent means tending to hold the sparking terminals e' and e'' in contact and one way of accomplishing this is to provide a spring 46, Fig. 1, which is connected with the arm 43 and with the body P of the igniter. When the rotor is "cocked", the arm 44 moves away from the arm 43 to thereby permit the electrodes to come into contact, and on the return movement of the rotor, the arm 44 imparts a powerful hammer blow on the arm 43 to effect a quick separation of the electrodes for the production of the igniting spark.

The starting and gaging device which constitutes the subject-matter of the present invention will now be described. This consists of a lever 4 which is fulcrumed on one of the pivot posts 11 and has a handle 5, so that in reality the device is a double arm or bell crank lever having a pivotal movement on the pin or post 11. The arm 4 is sufficiently greater than the distance between the pivot post 11 and the outer end of the adjacent arm 14 of the rotor that the free end of the arm 4 can engage the pivot post or member 16 of the crank arm 14 and cause the rotor to be moved to "cocked" position by the upward movement of the arm 4. Normally the starting device A is suspended in the dotted line position, Fig. 1, and to start the engine by means of a spark, the handle 5 is swung upwardly to the left to engage the arm 4 with the member 16 of the rotor crank arm 14. The movement of the handle 5 is then continued in the same direction so as to give an angular movement to the rotor and to place the springs 13 under tension. Finally, when the "cocked" position is reached, the arm 4 will slip under the member 16 of the crank arm 14 and allow the rotor to spring back to its normal position. It does not matter how slowly the rotor is moved to "cocked" position by the manually actuated starting device A, as the electric impulse is generated by the return movement of the rotor from "cocked" position when the arm 4 releases the rotor. It will be understood that the electrodes of the

igniting device will be separated at the time the electric impulse is generated, just as in the normal operation of the ignition apparatus. In order that the arm 5 may clear the member 16, the said arm is provided with an offset a , thereby permitting the arm 5 to be raised past the member 16 and the arm 4 engaged with such member.

To adapt the device A as a gage for holding the rotor in "cocked" position while the actuating means 28 is being adjusted, the free extremity of the arm 14 is provided with two projections 6 and 8 with an intermediate depression 7, the bottom of the depression being at a radial distance a , Fig. 3, from the center of the pivot post 11, while the projections 6 and 8 are located at the radial distances b and c , respectively. When the arm 4 is brought into engagement with the member 16, the projection 6 will first engage the member and finally a position is reached where the member 16 enters the depression 7, as shown in Fig. 3, and in this position the projection 8 locks the parts against return movement under the tension of the springs 13, and as the combined length of the arm 4 and crank arm 14 is greater than the distance between the center of the crank shaft 17 and pivot post 11, a toggle arrangement is provided, locking the rotor indefinitely in "cocked" position. The actuating element 28 can now be adjusted in the part 20 and the arm 30 also adjusted so that the tip of the member 28 will just engage the tip of the trip finger 39. After this adjustment is effected, the device A is released from the member 16 to allow the rotor to return to its normal position. In this manner, the release of the rotor from the actuating mechanism can be easily, quickly and accurately determined and thus the best operating results of the generator, igniter and engine obtained.

From the foregoing description, taken in connection with the accompanying drawing, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, is:—

1. In an ignition apparatus, the combination of a current generator including a rotor, an actuator for moving the rotor in one direction and automatically releasable therefrom, means for quickly moving the rotor in the opposite direction when re-

leased from the actuator, and a manually-actuated device for moving the rotor and releasing the same similarly to the said actuator.

2. In an ignition apparatus for explosive engines, the combination of a current generator including a rotor, engine-operated means for moving the rotor to, and releasing it at, cocked position, means for suddenly moving the rotor upon being released, and a manually-operated device for moving the rotor to, and releasing it at, cocked position for starting the engine by spark ignition.

3. In an ignition apparatus for explosive engines, the combination of a current generator including a movable inductor, an actuating means releasably engaged with the inductor for moving it to a given position, means for suddenly moving the inductor after such position is reached, and a starting device for moving the inductor to, and releasing it at, said position for the generating of ignition current to start the engine.

4. In an ignition device for explosive engines, the combination of a current generator including a rotor, an arm on the rotor, a spring connected with the arm, an engine-operated device for moving the rotor in a direction to place the spring under tension and adapted to then release the rotor, and a manually-operated device adapted also to move the rotor to place the spring under tension and thereupon release the rotor.

5. The combination of a current generator including a rotor, a crank arm on the rotor, a spring connected with the rotor, an actuator for the crank arm, and a lever having an arm adapted to releasably engage the crank arm for moving the rotor and releasing the same similarly to the said actuator.

6. A current generator including a rotor, a crank arm connected with the rotor, a spring having one end connected with the arm, an anchor for the other end of the spring, and a device mounted on the anchor for the spring and movable into engagement with the crank arm to move the latter and place the spring under tension and release the arm for permitting the spring to quickly return the rotor.

7. The combination of a current generator including a rotor, a crank arm on the rotor including a projecting member, a spring connected at one end with the said member, and a swinging device movable into engagement with the said member to swing the crank arm and place the spring under tension and releasable from the said member to permit the spring to quickly return the crank arm and rotor to normal position.

8. The combination of a current generator including a rotor, a crank arm on the rotor having a projecting member, a spring connected at one end with the member, an anchor for the other end of the spring, a

swinging member pivoted on the anchor and longer than the spring and having its free end adapted to engage the member for swinging the arm and moving the rotor while placing the spring under tension and to release the member to permit the spring to quickly return the arm and rotor.

9. The combination of a current generator including a rotor, a device for moving the rotor to cocked position, means for quickly moving the rotor from cocked position, and a gaging device pivoted on the generator for moving the rotor to cocked position and for holding it in a predetermined cocked position to permit the device to be adjusted with respect to the rotor.

10. The combination of a current generator including a rotor, an adjustable actuator for moving the rotor to a given position and then releasing the rotor, means for quickly moving the rotor when released, and a device mounted on the generator to engage the rotor for moving same into and holding it in said given position for permitting the adjustment of the actuator.

11. The combination of a current generator including a rotor, a trip finger connected with the rotor, a push rod adjustably mounted with respect to the trip finger to engage with and move the trip finger to a given position and then release the same, means for quickly moving the rotor when the actuator releases the trip finger, and a device for moving the rotor and holding it in such position of release to permit the actuator to be adjusted with respect to the trip finger.

12. The combination of a current generator including a rotor, a crank arm connected with the rotor, a member on the arm, a spring connected with the crank arm, a de-

vice movable into engagement with the member for moving the arm against the tension of the spring and adapted to interlock with the said member for holding the arm stationary while the rotor is in cocked position, and a rotor actuator adapted to be adjusted with respect to the rotor while held in cocked position by the said device.

13. The combination of a current generator including a rotor, an arm on the rotor, means for moving the rotor to cocked position, a spring placed under tension by the movement of the rotor to cocked position for returning the rotor when released from the actuator at cocked position, a swinging member movable into engagement with the arm for moving the rotor to cocked position and adapted to hold the arm in such cocked position, and means for adjusting the position of the actuator while the rotor is held in cocked position by the said swinging member.

14. The combination of a current generator including a rotor, an arm thereon, a spring connected with the arm, a member on the arm, a swinging lever mounted on the generator to engage the member and slip past the same to move the rotor to cocked position and having means with which the member is adapted to interlock for holding the member in cocked position, and an engine-operated actuator for moving the rotor to cocked position and adjustable with respect to the rotor while the latter is held in cocked position by the said swinging lever.

In testimony whereof I affix my signature in presence of two witnesses.

EMIL PODLESAK.

Witnesses:

A. E. SCHALK,

B. F. HARRINGER.

E. PODLESAK.

CURRENT GENERATOR AND IGNITER FOR INTERNAL COMBUSTION ENGINES

APPLICATION FILED DEC. 23, 1914.

Reissued Feb. 9, 1915.

13,878.

2 SHEETS-SHEET 1

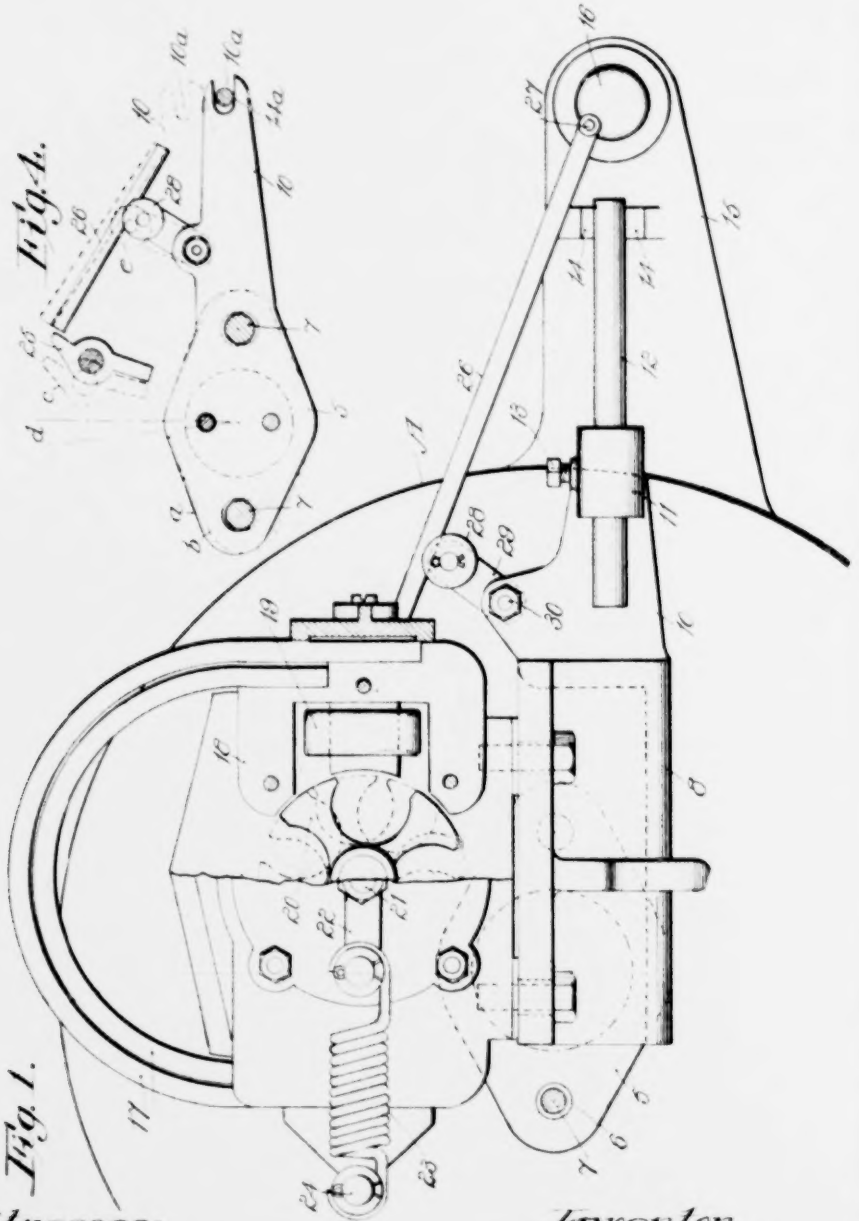


Fig. 1.
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E. PODLESK.

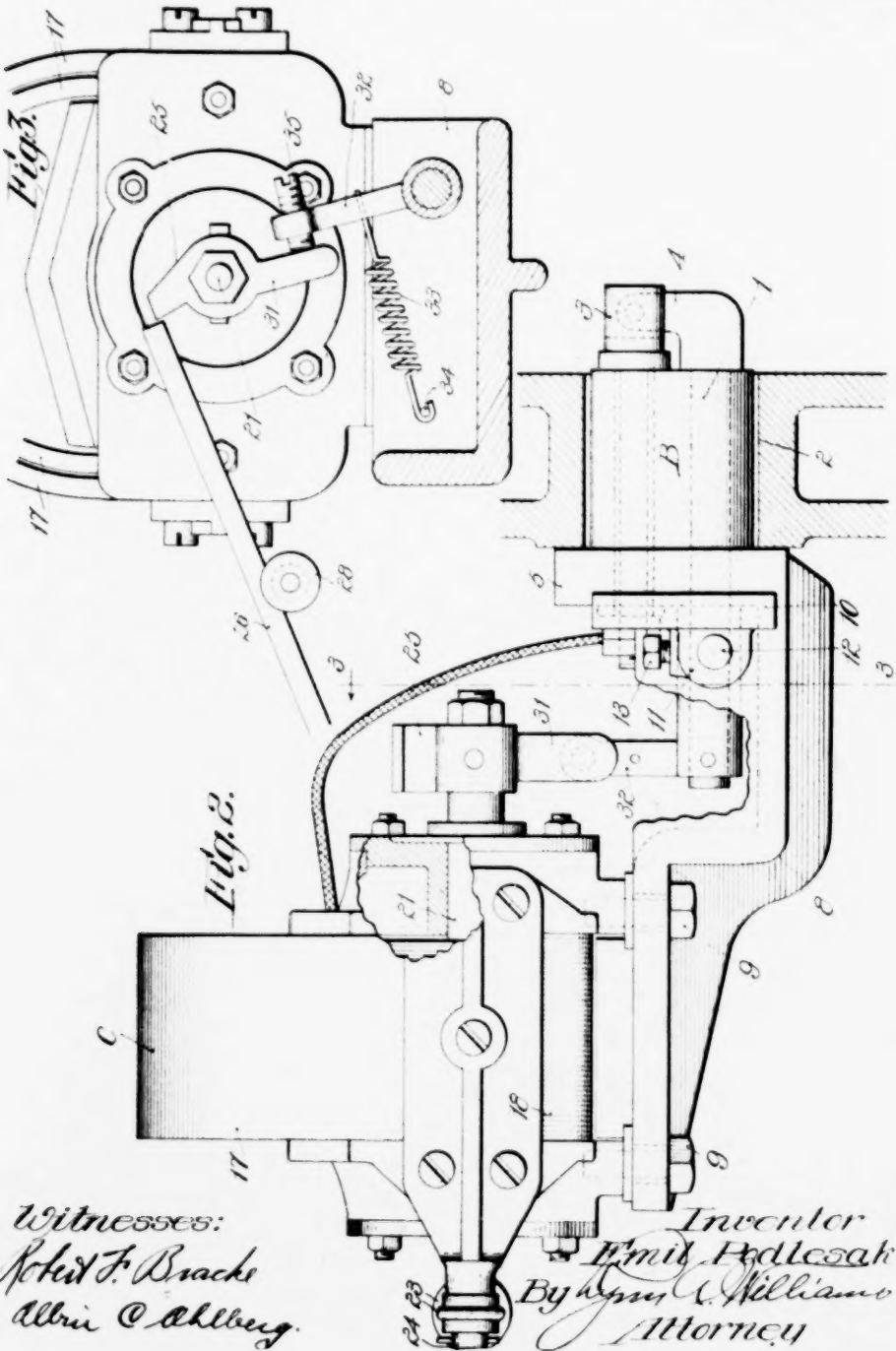
CURRENT GENERATOR AND IGNITER FOR INTERNAL COMBUSTION ENGINES.

APPLICATION FILED DEC. 23, 1914.

Reissued Feb. 9, 1915.

13,878.

2 SHEETS-SHEET 2.



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UNITED STATES PATENT OFFICE.

EMIL PODLESAK, OF TIFFIN, OHIO.

CURRENT-GENERATOR AND IGNITER FOR INTERNAL-COMBUSTION ENGINES.

13,878.

Specification of Reissued Letters Patent. Reissued Feb. 9, 1915.

Original No. 1,055,076, dated March 4, 1913. Serial No. 690,921. Application for reissue filed December 23, 1914. Serial No. 878,726.

To all whom it may concern:

Be it known that I, EMIL PODLESAK, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Current-Generators and Igniters for Internal-Combustion Engines, of which the following is a specification.

This invention relates to igniters of the make and break type and in which the magneto or current generator is combined therewith as a unitary structure that is fastened to the head or other suitable part of the engine cylinder, the rotor of the generator being operatively connected with the movable electrode of the igniter so that a reciprocatory actuator, push rod or equivalent means operating on the rotor trip finger against the tension of spring means causes the rotor to move to "cocked" position while the electrodes of the igniter are brought together, and then released from such "cocked" position so that the electromotive force generated by the sudden return movement of the rotor through the magnetic field of the generator will produce the igniting current whereby the spark is produced between the electrodes in the compression chamber of the engine. The combination of means and instrumentalities above referred to is the subject-matter of my pending application for Letters Patent of the United States, Serial No. 668,153, filed December 27, 1911, and the present invention relates to improvements especially adapted for igniters and generators of the type referred to.

The actuating means for the rotor and movable electrode is mounted on the engine cylinder or other suitable part and is operatively connected with some moving mechanism and has no connection with the magneto or igniter, since the actuator, which may be a push rod, rotating or oscillatory arm or the like, merely contacts with the trip finger of the rotor. As the igniter and generator must be removed from time to time for cleaning the electrodes and other reasons, it is of great importance that the igniter and generator be replaced in exactly the same position it was before removal; otherwise, the push rod will not be disposed in proper relation to the trip finger of the rotor to accomplish satisfactory results in the operation of the engine, generator and

igniter. The reason for this liability of the igniter being replaced in a different position from that which it originally occupied when all the operating parts, were adjusted to accomplish the best results, is due to the fact that the holes in the body of the igniter for receiving the bolts or fastening studs are made larger than the bolts or studs, as is also the opening in the engine cylinder for receiving the body of the igniter, this "latitude" between the parts being provided so as to facilitate easy removal of the igniter and to obviate the necessity of careful and expensive machining and fitting of the parts. By reason of the liability to error in replacing the igniter, there is provided an arm or equivalent means on the igniter body to inter-engage with a fixed part on the engine cylinder, so that there can be but one position in which the igniter can be attached to the cylinder, and that position is the one where the push rod or other actuator is in proper relation to the trip finger of the rotor. As the result of this arrangement, it is never necessary to adjust the relation of the various instrumentalities in replacing the igniter when it has been removed for cleaning or any other purpose.

In addition to the foregoing objects and advantages, the invention has certain other minor advantages which will appear hereinafter as the description proceeds in reference to the accompanying drawings, in which—

Figure 1 is a front view of the combined igniter and current generator applied to the head of an engine cylinder, part of the generator being shown in section. Fig. 2 is a front view thereof showing a portion of the cylinder head in section. Fig. 3 is a sectional view on line 3—3, Fig. 2. Fig. 4 is a diagrammatic view to show the results of a defective positioning of the igniter with respect to the operating push rod.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawings, A designates the head or other wall of a cylinder of an internal combustion engine; B, the make and break igniter; and C, the magneto current generator of the inductor type.

The igniter B comprises a cylindrical body 1 which passes through an opening 2

in the cylinder head A, the opening being of slightly larger diameter than the diameter of the igniter body, so that the latter can be easily inserted or removed. Passing through the igniter body is a fixed electrode 3 with which coöperates a movable or rocking electrode 4. The outer end of the igniter body is formed with a rhomboidal plate 5, which, as shown in Fig. 1, has bolt-receiving openings 6 that are slightly larger in diameter than the fastening bolts or studs 7 that pass through the openings and are fastened to the cylinder head A. Thus, there is considerable latitude allowed between the body of the igniter on the one hand and the cylinder head and fastening bolts on the other, and by reason of this, the igniter body is liable to be fastened to the cylinder head in a variety of positions within the limit of this latitude, the disadvantages of which have been hereinbefore pointed out, but are overcome by the improvements later to be set forth.

Extending from the plate portion 5 of the igniter body is a shelf or bracket 8 which forms a base to which the generator C is removably secured by stud bolts 9. Projecting laterally from the bracket or shelf 8 is an arm 10 which is formed at its outer extremity with a boss or enlargement 11 that has a passage through which extends an extension rod 12, the rod being fastened in any desired position by a set screw 13 or equivalent means. The outer extremity of this extension rod is located at a considerable distance from the axis of the igniter and this extremity is adapted to engage some fixed part of the engine, such for instance as lugs 14 on the arm 15 in which the operating shaft 16 rotates. The lugs 14 are spaced apart far enough for the extension rod to enter between them as the igniter body is inserted in the opening in the engine cylinder, and when thus positioned, it is impossible for the igniter body to shift angularly or around its axis and thereby disturb the proper relation of the igniter and generator operating means. The parts 10, 12 and 14 thus constitute means for insuring the proper positioning of the igniter and the design of the parts is such that no special care or adjustment is required in taking off or replacing the igniter.

The generator C is fully set forth in the pending application hereinbefore referred to, so that only a brief description here is deemed necessary. The generator comprises permanent horseshoe magnets 17 fastened to E-shaped pole pieces 18, on the middle projections of which are generating coils 19. In the present drawings, only one pole piece and coil is shown in Fig. 1, the other corresponding parts being concealed from view. Between the pole pieces oscillates a cruciform rotor 20 mounted on a shaft 21 which

has at one end oppositely disposed crank arms 22 which are connected with springs 23 that assume an alining position through the axis of the rotor when the latter is idle, the outer ends of the springs being fastened to studs 24 on the generator frame. On the opposite end of the rotor shaft is a trip finger 25 which is adapted to have a wiping engagement with a push rod 26 or other equivalent actuator, which rod has its end opposite from the trip finger connected with the crank pin 27 of the rotating shaft 16. The push rod or actuator has a combined reciprocatory and rocking movement on a bearing pulley 28 journaled on a support 29 which is fastened by a bolt or equivalent means 30 to the arm 10 of the igniter frame, said bolt forming a pivot on which the member 29 can be adjusted to different positions for bringing the free end of the push rod 26 into proper coöperative relation with the trip finger 25. The trip finger has a tail piece or arm 31 which is adapted to be engaged by an arm 32 fastened to the outer end of the movable electrode 4, the arm 32 being held yieldingly against the arm 31 by a helical extension spring 33 which has one end connected with the arm 32 and the other end anchored at 34 on the igniter frame. To obtain the proper set of the sparking points of the electrodes with respect to the rotor of the generator, one arm, such as 32, has an adjustable screw 35 which engages the arm 31. The spring 33 is of less tension than the return springs 23 of the rotor and is sufficient to maintain the arms 31 and 32 in contact during the first part of the cocking movement of the armature and to maintain the electrodes in contact during the final part of such cocking movement, it being understood that the electrodes are normally separated, and that they come into contact before the rotor or armature finishes its cocking movement, or the position of the rotor shown by dotted lines in Fig. 1. At the end of the cocking movement, the push rod 26 slips off the tip of the trip finger, and the springs 23, which have been extended or placed under tension during the cocking movement, quickly snap the rotor back to and beyond its normal position, as indicated by the dot and dash lines, Fig. 1. This quick movement of the rotor quickly changes the path of the magnetic flux through the pole pieces and rotor, with the result that a high electro-motive force is induced in the generating coils, the maximum electro-motive force occurring at about the time the electrodes are separated during the return movement of the arm 31 of the trip finger, such arm being adapted to strike the arm 32 a hammer blow for effecting a quick separation of electrodes.

By referring to Fig. 4 the effect of a defective positioning of the igniter is clearly

depicted. Without the use of the positioning-controlling parts 10, 12 and 14, it is possible for the igniter to be secured in either the full line position *a* or dotted line position *b*, because of the latitude provided between the igniter body and the bolts and cylinder wall. In other words, the igniter can be fastened to one side or the other of its true central position to an extent corresponding to the angle *d*. Thus, the trip arm of the rotor 25 would be in the dotted line position *c* when the igniter is in the dotted line position *b*, and as a consequence the push rod 26 would not be long enough to operate the trip finger 25, and furthermore the push rod supporting roller 28 would be raised to the dotted line position *e*, thereby raising the active end of the trip rod above the tip of the trip finger. When the igniter body is in the full line position *a*, the trip finger is shifted to the right and the supporting roller 28 is lowered so that the push rod and trip finger will obviously be in proper position. These contingencies can be guarded against by providing the arm 10 on the igniter body and having some means on the fixed part of the engine to engage such arm, such means being the lugs 14, as in Fig. 1, or a bolt or pin 14^a engaging in the slot 10^a of the arm 10, as in Fig. 4.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, is:—

1. The combination of an engine cylinder, a make and break igniter, fastening means for securing the igniter in position on the cylinder, an electric generator having its movable element operatively connected with the movable element of the igniter, an actuator for the movable elements of the igniter and generator, said igniter being removable from the cylinder while the actuator remains in place, and means in addition to the said fastening means for insuring the correct positioning of the igniter with respect to the actuator when the former is replaced on the engine after removal and for preventing shifting of the igniter, said latter means comprising engaged parts on the engine cylinder and igniter.

2. The combination of an engine cylinder,

an igniter, means for removably fastening the igniter on the cylinder, there being sufficient play between the parts to insure removal of the igniter while rendering the igniter liable to replacement for different positions, an actuator for the igniter requiring a predetermined position of the igniter with respect thereto, and means partly on the igniter and partly on the engine for insuring such predetermined relative position of the actuator and igniter.

3. The combination of an engine cylinder, an igniter and electric generator forming a unitary structure removably mounted on the cylinder, fastening means for the said unitary structure, said structure being liable to replacement in different positions on the cylinder, an actuator for the movable elements of the generator and igniter and operatively connected with the moving part of the engine, and means in addition to the said fastening means for insuring a predetermined relative position of the actuator and movable elements of the igniter and generator, said latter means consisting of relatively fixed parts of the said structure and engine cylinder which inter-engage when the said structure is in proper position.

4. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising a laterally-extending arm on the igniter, and a fixed part on the engine with which the arm is adapted to engage.

5. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising an arm on the igniter, a longitudinally adjustable member on the arm, and a part fixed on the engine with which the said member is adapted to releasably engage.

6. The combination of an engine cylinder, a make and break igniter mounted thereon and liable to assume different positions within certain limits, an actuator for the movable element of the igniter, means for moving the actuator, a laterally-extending arm on the igniter, and means fixed on the engine with which the arm is removably connected to insure such position of the igniter that the actuator and movable electrode will be in proper relation to each other, and means on the arm for supporting the actuator.

7. The combination of an engine cylinder, a make and break igniter removably mounted thereon and liable to assume different positions within certain limits, a generator carried by the igniter and removable therewith as a unitary structure, the movable elements of the igniter and generator being operatively connected, an actuator for the said movable elements, a moving part of the engine with which the actuator remains connected while the igniter and generator are removed, and engaging means between the said structure and engine cylinder for permitting the placing of the latter in only one position.

8. The combination of an engine cylinder having an opening, a make and break igniter secured in the opening and liable to assume different positions within certain limits, a generator mounted on the igniter and removable therewith, means for operatively connecting the movable elements of the igniter and generator, a push rod, a trip finger connected with one of the movable elements and with which the actuator is adapted to engage, and means arranged partly on the engine and partly on the igniter and generator structure whereby the push rod and trip finger will be in proper relation to each other each time the igniter and generator structure is replaced after removal from the cylinder.

9. The combination of an engine cylinder, an igniter mounted thereon, a generator mounted on the igniter, means for operatively connecting the movable elements of the generator and igniter to move together, a trip finger connected with the said movable elements, an operating shaft, a push rod adapted to engage the trip finger, means for reciprocating the rod by the shaft, and means whereby the igniter and generator structure can be fastened in only one position where the push rod and trip finger are in proper relation to each other, said means comprising a part on the igniter and generator structure and a part on the engine with which the first part is detachably engaged.

10. The combination of an engine, an igniter mounted on the cylinder thereof, a bracket extending from the igniter, a generator on the bracket, means for operatively connecting the movable elements of the generator and igniter together, a trip finger connected with the movable elements, a push rod adapted to wipe on the trip finger, means for actuating the push rod, an arm extending from the bracket, a support on the arm for the trip rod, and means fixed on the engine with which the arm engages whereby the igniter can be replaced on the engine cylinder in only that position in which the trip finger and push rod are in proper relation.

11. The combination of an engine cylinder, an arm extending laterally from the

head thereof, a shaft bearing in the arm, a push rod, and a crank pin connection between the shaft and push rod, with an igniter mounted on the engine cylinder and having its movable electrode operatively related to the push rod, an arm extending from the igniter, and means on the arm of the engine cylinder with which the first-mentioned arm detachably engages for permitting the igniter to be attached in only that position where the push rod and movable electrode are in proper relation, and means on the first-mentioned arm for movably supporting the push rod.

12. The combination of an engine cylinder, an igniter and current generator structure removably mounted thereon, the movable elements of the igniter and generator being operatively connected, a trip finger connected with such movable elements, an arm extending from the igniter, means fixed with respect to the engine cylinder for engagement with the arm whereby the said structure can be fastened in only one position on the cylinder, an actuating push rod arranged to engage the trip finger, means for reciprocating the push rod, and an adjustable support mounted on the arm and on which the push rod moves.

13. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

14. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

15. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

16. The combination of an igniter frame,

comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion motor, sparking electrodes mounted in said body, a magneto generator mounted on said base, means for actuating the said generator to generate current, means for actuating one of the electrodes, and means relatively fixed on said motor for engaging said laterally extending arm.

17. The combination of an igniter frame, comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion engine, sparking electrodes mounted in said body and adapted to make and break a circuit within the combustion chamber of the engine, a magneto generator mounted on said base, means for actuating the magneto generator to generate current, means for operating one of the electrodes coöperatively with said generator, a member extensibly mounted in said laterally extending arm, and means secured in relatively fixed relation on the engine to engage said extensible member.

18. In combination, a magneto generator comprising a field magnet, a pair of pole pieces, inductive windings, and a rotor mounted on a shaft, means for cocking said rotor, spring means for suddenly bringing said rotor back upon the release, an igniter frame comprising a body and a shelf extending therefrom and supporting said generator, a stationary insulated electrode and a movable electrode mounted in said body, said movable electrode adapted to make contact with the other said electrode, an arm on said rotor shaft and adapted to coöperate with said arm on movable electrode to so oscillate the movable electrode as to make and break contact with said other electrode, a circuit connecting said windings to said electrodes, and an arm extending from said igniter frame and adapted to engage on a relatively fixed member on the engine associated with said frame.

19. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

20. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating

on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

21. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

22. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

23. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

24. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor

for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said

arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

In witness whereof, I hereunto subscribe my name this 30th day of October, A. D. 1914.

EMIL PODLESAK.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

E. J. KANE.

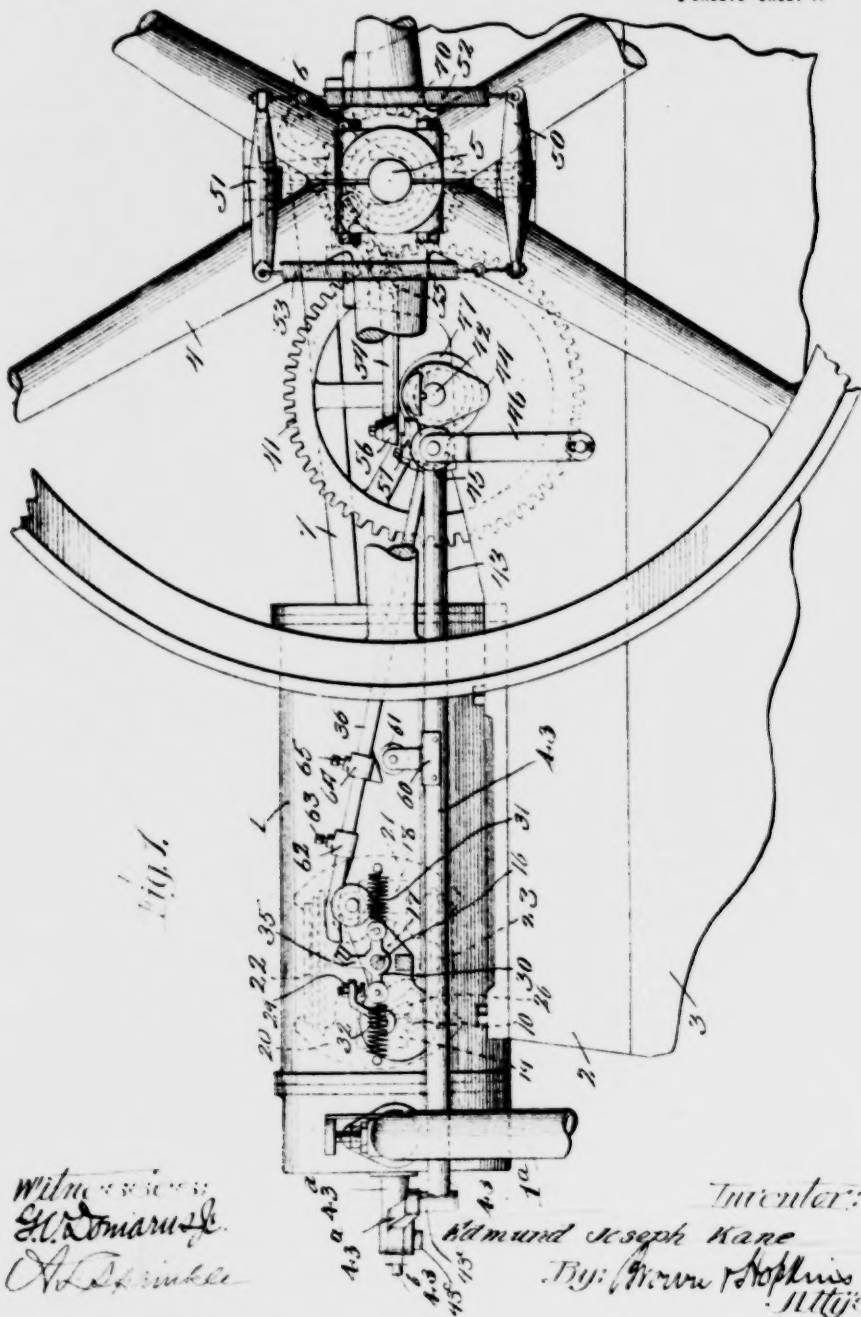
ELECTRIC IGNITER FOR EXPLOSIVE ENGINES.

APPLICATION FILED FEB. 2, 1910.

1,204,573.

Patented Nov. 14, 1916.

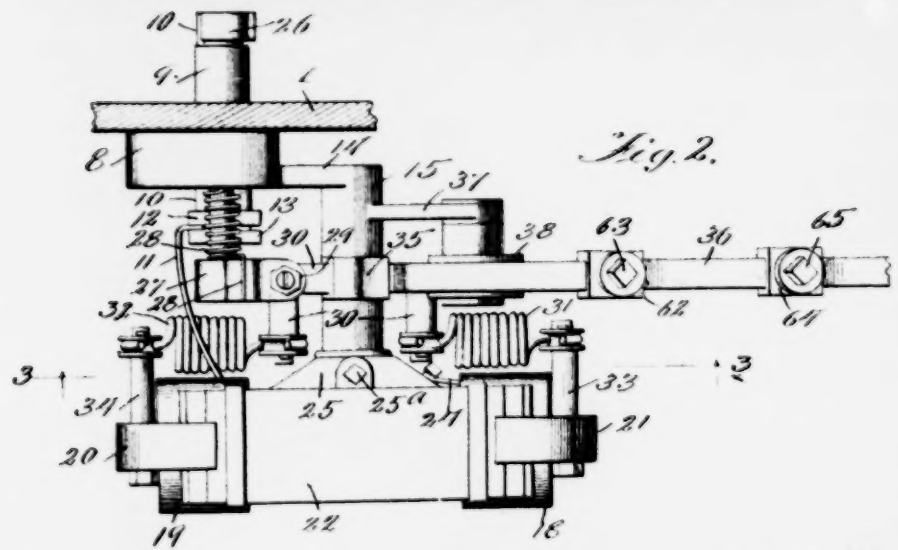
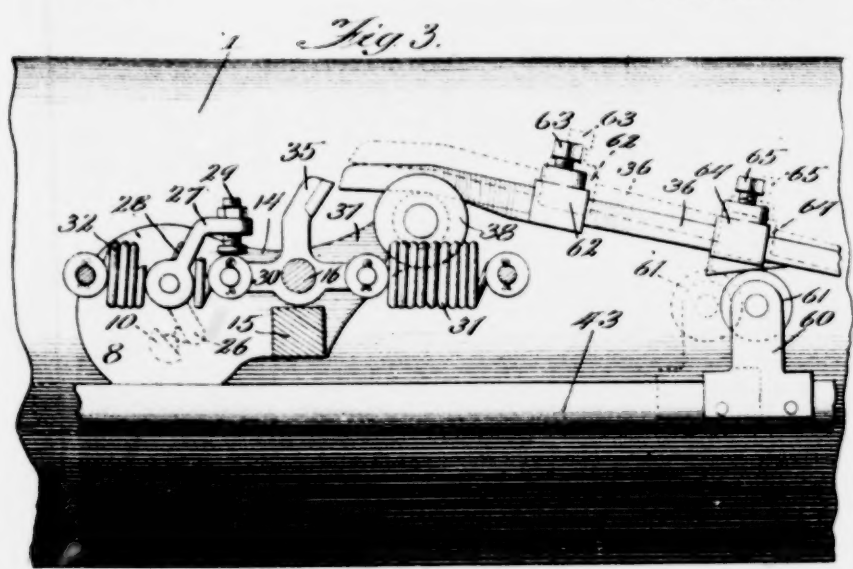
2 SHEETS—SHEET 1.



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2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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ELECTRIC IGNITER FOR EXPLOSIVE-ENGINES.

1,204,573.

Specification of Letters Patent.

Patented Nov. 14, 1916.

Application filed February 2, 1910. Serial No. 541,428.

To all whom it may concern:

Be it known that I, EDMUND JOSEPH KANE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Igniters for Explosive-Engines, of which the following is a full, clear, and exact specification.

The invention relates to improvements in electric-igniters for explosive engines.

The object of the invention is to provide an electric igniter mechanism with novel and improved means for producing the spark for firing the charge.

A further object of the invention is to provide in a device of the character described improved means by which when the exhaust valve is held open during the operation of the engine by the speed governor mechanism and no charge in the cylinder is to be exploded, the igniter mechanism is rendered inoperative and consequently the generator consisting of the oscillating or rotating armature or inductor remains idle and a spark is not produced and as a consequence the resulting wear upon the moving parts and the loss of energy required to generate a useless spark is avoided.

A further object of the invention is to provide in a device of the character described, direct and positively operating means for imparting movement to the oscillating armature or inductor, which preferably comprises the movable part of the generator.

To the attainment of these ends and the accomplishment of certain other new and useful objects, as hereinafter described, shown in the accompanying drawings forming a part of the specification, and finally pointed out more specifically in the appended claims, the invention is directed.

In the said drawings, Figure 1 is a side elevation of an explosive engine with the invention attached and having parts of the igniter mechanism shown in section and other parts shown in broken lines in order to more fully disclose the details of construction of the igniter mechanism and one manner of attaching the invention to an explosive engine. Fig. 2 is a detail an view of the igniter mechanism with the walls of the cylinder of the explosive engine to which it is attached in section. Fig. 3 is an enlarged

detail view of the igniter parts similar to the view in Fig. 1, but showing in dotted lines the relative movements of the exhaust valve operating rod, and the igniter operating means by which the igniter mechanism or generator is rendered inoperative and a spark not produced when no charge is to be exploded in the cylinder because of the action of the speed governor through the exhaust valve operating means on the generator. This view is taken on line 3-3 of Fig. 2.

Similar characters of reference indicate similar parts throughout the several views.

1 is the engine cylinder, and 2 the main frame.

3 is the engine base.

4 is the fly-wheel on shaft 5 provided with a crank 6 operated by connecting rod 7 pivoted to the piston on the interior of the cylinder 1 in the usual or any desired manner.

The engine cylinder 1 is provided with the usual side opening adapted to receive the usual igniter block 8 which is provided with an inner extension 9 fitted through the opening and extending into the cylinder 1. In the horizontal opening through the block 8 extends a stationary electrode 10 which is preferably insulated from the igniter block 8 by suitable insulating material in the usual manner and not herein specifically shown, since it is the common practice to insulate the stationary electrode from the igniter block rather than the movable electrode. Outside the block 8 on the electrode 10 is provided means for the securement to the electrode 10 of the wire 11, such means preferably comprising a threaded outer end on the electrode 10 and the two threaded chamfered or polygonal nuts 12 and 13, between which one end of the wire 11 may be secured.

Secured to the igniter block 8 and preferably cast integral therewith is an arm 14 extending for a short distance approximately parallel with the outer wall of the cylinder 1 and provided at its forward extremity with the angular bearing portion 15 into which the shaft 16, on which is carried the armature or inductor, is journaled. The armature or inductor may be of any desired type as well as the construction of the field of the igniter but the preferred form is an armature or inductor of the form shown only in dotted lines as indicated by the ref-

erence character 17 in Fig. 1 of the drawings, which, although not specifically shown may consist of masses of laminated iron suitably joined together and of approximately the form shown in dotted lines in Fig. 1 and being mounted to oscillate with shaft 16, will, in a well known manner, produce rapid periodic reversals in the magnetic polarity of the cores 18 and 19 indicated in broken lines on Fig. 1 and will in a well known manner set up alternate currents in the coils surrounding them. The wound cores 18, 19 may consist of projections from the laminated iron plates indicated at 20, 21, which at their upper and lower extremities are joined by the magnet plates 22, 23.

While I have herein shown the invention applied to one specific form of generator or magneto and have to an extent shown and described the details of construction of such magneto or generator, it will be apparent that the invention may be applied by those skilled in the art to any type of magneto or generator whether of the oscillating type of armature or inductor or whether of the constantly rotating type of armature or inductor. It will also be apparent that the invention may equally be applied to magnetos or generators for furnishing electrical ignition whether the armature or moving part is of the wound type instead of the laminated metal or whether the field be of the ordinary form of winding.

The laminated cores 18, 19, may be wound in the manner common to this type, one end of the winding indicated by 24 being connected to the supporting block 25 in contact with sleeve 15 and secured thereto by set screw 25^a, which completes the circuit to the bearing block 8 and the movable electrode 26, which is also journaled in bearing block 8 and extends to the outside of the block, being provided at its outer extremity with the crank arm 27 and held normally in such position that the electrodes 10 and 26 are normally in contact with each other by means of the torsion spring 28, one end of which is secured to the igniter block 8 and the other end in engagement with the crank arm 27. The wire 11 already referred to as in contact with electrode 10 leads directly to the wound core 19, thus completing the electrical circuit. To the supporting block 25 is secured the laminated field members 20, 21, which carry the wound cores 18, 19. The end of the crank arm 27 on the movable electrode 26 is provided with an adjustable screw 29 provided with a lock nut and having a head at its lower extremity for engagement with the oscillating member 30, which is secured to rotate with the oscillating shaft 16 carrying the armature or inductor 17. The oscillating member 30 secured to the armature shaft 16 is provided with horizontally extending arms, the ex-

trемities of which are in engagement each with one end of coil springs 31, 32, which have their outer extremities secured to brackets 33, 34, extending laterally from the laminated field members 20, 21. The springs 31, 32 normally exert a tension on the oscillating member 30, thus holding the armature or inductor 17 in its normal position and offering elastic resistance to the rotation of the inductor or armature, which in order to rotate or oscillate must move with the oscillating member 30 through the medium of the armature shaft 16, to which both are secured. The oscillating member 30 is provided with a vertically extending projection or finger as indicated at 35 adapted for engagement by the reciprocating member 36 for the purpose of oscillating the armature or inductor 17 against the tension of springs 31, 32. The extension 15 carried on the igniter block 8 through the connecting portion 14 is provided with an extending branch as indicated at 37, the outer extremity of which carries a grooved roller or sheave 38, which serves as an anti-friction bearing and support for the reciprocating member 36, the free end of which adjacent the grooved roller or sheave 38 is adapted normally to engage the finger 35 to oscillate the armature or inductor. Reciprocating movement is imparted to the member 36 preferably from the crank shaft 5 of the engine, and a convenient way of accomplishing this purpose is to secure to crank shaft 5 a gear as indicated at 40, which meshing with the gear 41, is of suitable size to impart the desired speed to the igniter whatever the character of the engine.

In the present embodiment of the invention, as shown particularly in Fig. 1, the engine is of the single cylinder four-cycle type, the gears 40 and 41 being of proper proportions to impart the desired speed to the shaft 42 and gear 41 for operating the exhaust valve rod, as indicated at 43, which is accomplished by the action of the eccentric cam 44 keyed on shaft 42 and bearing against the anti-friction roller 45 carried at the upper extremity of the pivotal support 46 of the exhaust valve operating rod 43. The igniter operating member 36 may be operated from the shaft 42, which also carries the eccentric cam 44 in any desired manner, a convenient form being indicated in the drawings in Fig. 1 consisting of an eccentric secured to shaft 42 and carrying a strap 47 secured to the forward extremity of the igniter operating member 36.

It is well known in this art that means such as just described may be used for operating the exhaust valve operating rod and it is equally well known in explosive engines that centrifugal governors may be employed on moving parts of the engine in order to control the speed of the engine by

preventing the closing or the exhaust valve when the engine reaches or exceeds the given speed. In explosive engines of the type herein shown, the piston is employed as a pump for drawing the explosive material into the cylinder but when the exhaust valve of the engine is held open automatically the action of the piston within the cylinder in creating a vacuum will be to cause the air to rush into the cylinder when the exhaust valve is open, following the lines of least resistance, so that a charge will not be drawn into the cylinder when the exhaust valve is open and consequently there will be no explosion take place in the cylinder. Heretofore it has been the practice in the use of igniters to connect them up positively with the engine so that the igniter runs constantly with the engine and a spark is produced at each cycle of operation of the engine whether a charge of explosive has been drawn into the cylinder or not. If, therefore, the engine has reached or exceeded a given speed and the explosion has been cut out by reason of the action of the governor due to the excessive speed, no explosion can take place until the speed has been reduced to or below the given degree and yet the igniter mechanism must continue to operate and the spark is wasted together with the energy necessary to create it and the igniter mechanism has been subjected to the wear incident to such operation for no useful purpose. It is to obviate this condition of useless wear on the igniter mechanism that is one of the special purposes of this invention, as stated, and it is not important what specific means for governing the speed of the engine be employed but the common form of reciprocating exhaust valve operating rod has been shown as commonly operated on four-cycle engines and this is further shown under the control of an ordinary centrifugal governor comprising pivoted weighted members 50, 51, secured to the fly-wheel 4 or the crank shaft 5 of the engine and normally held in a given position by suitable springs 52, 53, which may be adjustable in order to vary their tension in a well known manner not necessary to describe for the purposes of illustrating the present invention. These spring controlled pivoted members 50, 51, may be connected with a suitable member slidably mounted on crank shaft 5, which preferably has an exterior cone shape and against which bears one end of the latch 54 which is pivoted at one end on the main frame of the engine and has one end, as indicated at 56, adapted to engage with a notched member 57 on the exhaust valve operating rod 43. The usual operation of this form of governor is that, with the springs 52, 53 adjusted to have a given tension when the speed of the crank reaches or exceeds a given speed, the op-

eration of the governor will cause the end 56 of the latch to be depressed so that it will engage the notched member 57 on the exhaust valve operating rod 43 and prevent the return of this rod when released by cam 44 and in this manner hold open the exhaust valve preventing further explosions of the engine because preventing the drawing in of a charge until the speed of the crank shaft falls below the given speed when the spring controlled members 50, 51 on the governor will act to release the exhaust valve operating rod and permit the exhaust valve to close, which will then cause the action of the piston to draw in a charge of explosive for the use of the engine.

It is obvious that even though the reciprocating member 36 which is shown as constantly operating from the crank shaft of the engine shall operate the igniter mechanism, the spark produced will be wasted if the exhaust valve is not closed so that a charge of explosive is provided within the cylinder. It is found by experience that it is very desirable to avoid all the wear and tear possible on the igniter mechanism. In order therefore that the igniter mechanism may be rendered inoperative and consequently no spark produced when there is no charge in the cylinder to be exploded by reason of the exhaust valve being automatically kept open due to the engine having passed a given speed and because of the governor control over the exhaust valve, I provide means for automatically stopping the operation of the igniter mechanism under the control of the exhaust valve operating means. In the present embodiment of the invention the exhaust valve being under the control of the exhaust valve operating rod 43 I secure to the rod 43, in any suitable manner, a support 60 carrying at its upper extremity a suitable anti-friction roller 61. In order that the igniter operating member 36 may be properly timed to release the spring controlled igniter mechanism, the rod 36 is provided with a wedge block 62 adjustably secured thereto by set screw 63. By this means the timing of the igniter mechanism is secured. Another wedgeblock similar to the block 62 but having its inclined face in the opposite direction is also adjustably secured on the igniter operating member 36, as indicated at 64, and this member is adjustably secured to the member 36 by set screw 65. The operation of the exhaust valve cut out in its relation to the igniter mechanism is best seen from an inspection of the parts depicting the exhaust valve operating rod 43 and the igniter operating member 36 at the extremes of their movements as indicated by the full and dotted lines representing those parts, as shown in Fig. 3.

The operation of the mechanism or as 130

much thereof as pertains to the features of novelty herein described and claimed is as follows: The operator, desiring to start the engine, may turn the same in the usual manner, thus drawing in the charge of explosive into the cylinder. The operation of starting the engine will also impart movement to the igniter or generator operating member 36 through the gears 40 and 41, the shaft 42 and the eccentric secured thereto which operates the member 36. The movement of the member 36 causes its extremity adjacent the igniter mechanism to engage the upwardly extending arm 35 near its upper extremity and thus rotate the member 30, the shaft 16 and the armature or inductor of the generator carried thereon against the tension of springs 31, 32. This rotation or oscillation of the inductor or armature of the generator will cause a current to be generated which will pass through the electrodes 10 and 26 in the circuit already described. The adjustable wedge block 62 under control of set screw 63 on the igniter operating member 36 may be adjusted so that the forward end of the member 36 will become disengaged from the arm 35 on the oscillating member 30 at the time the current passing through the electrodes 10 and 26 is near its maximum strength. The sudden release of the oscillating member 30 being under the control of the springs 31, 32 will cause it to be returned to normal position, as shown in all of the figures, under considerable momentum which will carry the inductor or armature of the generator, the shaft 16 and the oscillating member 30 beyond the normal position and will cause the extremity of the oscillating member 30 adjacent the crank arm 27 to strike the adjustable screw-threaded member 29. This will rotate the crank arm 27 against the action of spring 28 and will at the same time separate the movable electrode 26 from the stationary electrode 10. The current being at about its maximum strength, as stated, a spark will then pass between the electrodes 10 and 26.

The engine having reached or passed a given speed by reason of which the governor mechanism has locked the exhaust valve operating rod 43 against closing the exhaust valve, the support 60 on the exhaust valve operating rod 43 will be carried to the position indicated in dotted lines in Fig. 3 by which the antifriction roller 61 carried thereby will pass under the adjustable wedge block 64 and operate the igniter operating member 36 to the position indicated in dotted lines also in Fig. 3. In this position it will be seen that although the igniter operating member 36 continues to operate it will be held in a position where its operation will not affect the igniter mechanism or generator which will remain inactive until

the exhaust valve operating rod 43 is returned to normal.

By means of the mechanism as described, it will be seen that the igniter mechanism or generator including the spring controlled oscillating member 30, the armature shaft 16 together with the armature 17 and the movable electrode will all be cut out and remain inactive at all times when the engine is running above normal speed and it is not desired to ignite a charge in the cylinder. It will also be seen that the arrangement of the parts as described for operating the oscillating form of igniter or generator herein shown is exceedingly simple and direct and that by directly operating the oscillating means controlling the armature or inductor through the medium of the reciprocating member 36 I provide an exceedingly simple and durable mechanism that is certain in its operation and not liable to get out of order, and furthermore the movable parts of the igniter being rendered inactive at all times when the exhaust valve is open, there is no useless current generated in the igniter as is the case with the igniters positively operated from the crank shaft of the engine without means for cutting out the operation of the igniter mechanism under the control of the exhaust valve operating means or the speed governor.

In order that the invention might be fully understood the details of the preferred embodiment thereof have been thus specifically described but it is not desired to be limited to the exact details of construction thereof, for it will be apparent that many modifications may be made by those skilled in the art without departing from the purpose and spirit of the invention, and what I claim is—

1. In an explosive engine, the combination with a magneto, of means for operating the magneto by the running of the engine, a speed governor operated by the engine, and means under the control of the speed governor for rendering the magneto operating means inoperative when the engine passes or exceeds a predetermined speed.

2. The combination in an explosive engine having a speed governor, and an exhaust valve operating rod operatively connected with the speed governor, of a magneto, means for operating the magneto by the running of the engine, and means adapted to be operated by the movement of the exhaust valve operating rod for rendering the magneto operating means inoperative.

3. In combination with an internal combustion engine, a speed governor associated with the engine and operatively connected therewith, ignition mechanism for said engine comprising make and break spark electrodes and a magneto, means operated by the engine for effecting the operation of both the magneto and spark electrodes in

timed relation one to the other, and mechanism controlled by said speed governor for rendering said engine operated means incapable of effecting the operation of the magneto and spark electrodes whenever the engine passes or exceeds a certain predetermined speed.

4. An internal combustion engine of the hit and miss type having an exhaust valve, an exhaust valve operating rod and a speed governor in operative relation to said exhaust valve operating rod arranged to shift the latter to hold the exhaust valve in open position whenever the engine exceeds a certain predetermined speed, in combination with an igniter comprising make and break electrodes, a magneto for supplying ignition current to said igniter, a reciprocating push rod driven by the engine for effecting actuation of the magneto and igniter electrodes together with means operated by the exhaust valve operating rod for rendering the reciprocating push rod incapable of actuating the magneto and igniter electrodes whenever the engine exceeds a certain pre-

determined speed, the exhaust valve operating rod and the governor cooperate to hold the exhaust valve in open position, as aforesaid.

5. In combination with an internal combustion engine, a speed governor driven from the engine, ignition mechanism for said engine comprising an igniter and a magneto for supplying ignition current to said igniter, actuating mechanism driven by the engine for effecting the operation of the magneto, and devices controlled by the speed governor for rendering said actuating mechanism incapable of effecting the operation of the magneto whenever the engine passes or exceeds a certain predetermined speed.

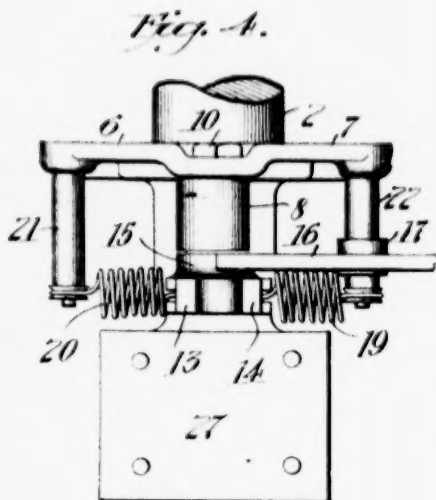
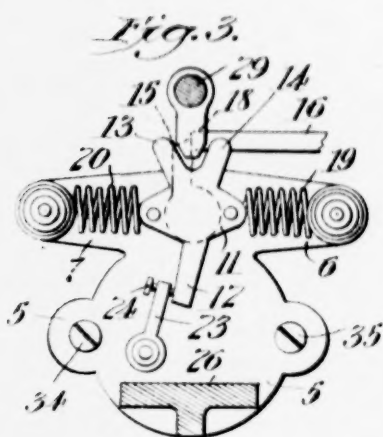
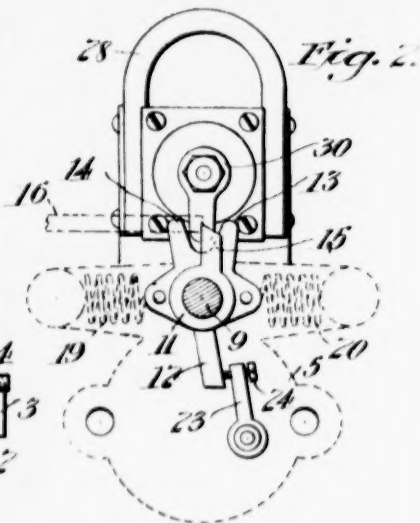
In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 22nd day of January, A. D. 1910.

EDMUND JOSEPH KANE.

Witnesses:

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1,236,790.



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925

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IGNITING MECHANISM FOR INTERNAL-COMBUSTION ENGINES

1,236,790.

Specification of Letters Patent.

Patented Aug. 14, 1917.

Application filed October 1, 1914. Serial No. 864,447.

To all whom it may concern:

Be it known that I, HARRY RANDOLPH VAN DEVENTER, a citizen of the United States, residing at Sumter, in the county of Sumter and State of South Carolina, have invented certain new and useful Improvements in Igniting Mechanism for Internal-Combustion Engines, of which the following is a specification, reference being had to the accompanying drawing.

This invention relates to igniters of the make-and-break type, and has for its purpose the provision of an igniter bracket upon which magneto may be mounted, the magneto armature or rotor being oscillated by means of suitable mechanism carried upon the igniter bracket.

A further object is to provide a bracket adapted to be mounted on an engine, and carrying the engine igniter and the magneto, and all of the operating means therefor, the operating means being so disposed in regard to the engine push rod or other actuating device, that the magneto may be removed without interfering in any way with the operation of the igniter proper, thus permitting battery to be connected to the igniter in the event of any trouble with the magneto.

Another object is to provide a combined igniter and magneto mounting having a flange adapted to be secured to the engine cylinder by suitable means, and carrying on this flange suitable spring means for oscillating both the magneto and the igniter.

Figure 1 is a side view, partly sectional, of my invention. Fig. 2 is a view of same looking toward the end of the magneto on the line *a, b*, Fig. 1, and showing diagrammatically the arrangement of the various parts. Fig. 3 is a diagram looking toward the igniter on the line *c, d*, Fig. 1 and showing the shape of the igniter flange casting. Fig. 4, a view looking down on the mechanism with the magneto removed. Like figures of reference denote the same parts wherever they are shown.

1 denotes the wall of the engine cylinder. Fitted into this in the usual manner such as the bolts 34, 35 is the igniter body 2 carrying the movable contact 3 and fixed contact 4 constituting the usual make-and-break igniter mechanism. A flange 5 pro-

jects around the aperture in the cylinder, and projecting from this flange and preferably integral therewith are the arms 6 and 7, and the boss 8, the latter forming a bearing for the shaft 9 which is secured in the bearing in any suitable manner, such as the screw 10. On the outer end of shaft 9 is fastened the trip lever 11, which is provided with a projecting igniter trip finger 12, and two upwardly projecting magneto fingers 13 and 14. There is also an engine trip 15, adapted to be engaged by the push rod 16, the outer end of said rod being suitably connected to some moving part of the engine so that the rod has a reciprocating motion over the small pulley 17, which causes the inner end of the rod 18 to push inwardly against 15 until 15 rides under it. Such a trip motion is now commonly used in connection with make-and-break igniters.

Attached to the trip lever 11 are suitable springs 19 and 20 which cause the trip lever to occupy normally the position shown in the drawings. These springs are supported on suitable studs 21 and 22 on the ends of the arms 6 and 7.

The movable contact 3 of the igniter extends outwardly through the flange 5, and carries at its outer end an arm 23 having suitable adjusting means such as screw 24, whereby the relative positions of 23 and the igniter trip finger 12 may be adjusted. This is occasioned by the necessity, when some magnetos are used, of having the igniter contacts closed; while again, when battery is used, it is preferable to have igniter contacts normally open.

A spring or any other suitable means 25 may be employed to hold the contacts of the igniter together, or arm 23 in contact with igniter trip finger 12, which would leave the contacts normally open.

Projecting from the flange 5 and preferably integral therewith, is a bracket arm 26 forming at its upper end the support 27, upon which may be mounted any suitable magneto 28. The shaft 29 of the magneto carries a dog 30 the lower end of which is positioned between magneto fingers 13 and 14 of the trip lever. A suitable connection 31 is made between the circuit terminal 32 of the magneto, and the binding post 33 on the outer end of the fixed contact 4 of the

igniter, this fixed contact being suitably insulated from the frame or body 2.

Presuming the magneto to be of the alternating current type the armature or rotor of same is so set in relation with the dog 30 that when the dog is moved to the left, Fig. 3, and suddenly released, that the peak of the current wave produced by the movement of the armature will occur at the same time the igniter points in the cylinder separate. This is accomplished by the push rod 16 engaging the trip 15 thereby pushing the trip lever to one side which causes 15 to slip off the end 18 of 16. When this occurs springs 19 and 20 cause a quick return of the trip lever to its normal or central position, and the fingers 13 and 14 cause a corresponding rapid movement of the dog 30 thereby actuating the magneto: At the same time the igniter trip finger 12 strikes arm 23 causing the separation of the igniter contacts in the cylinder thereby producing a spark.

If for any reason it is desired to remove the magneto, it may be unbolted from the support 27 and the connection 31 removed from the binding post 33. Any other suitable current source may now be connected to 33 and the engine operated without the magneto, as the parts that operate the igniter have not been disturbed.

I am aware that it is old to use an oscillating magneto mounted on a bracket integral with the igniter flange 5, but in all such arrangements the springs 19 and 20 and the trip lever 11 are mounted on the magneto and form part of same. This being the case it is obvious that the removal of the magneto from the bracket removes the means by which the igniter arm 23 or its equivalent is operated, and therefore the engine cannot be used until the magneto is replaced. This is very inconvenient in cases of magneto trouble, and makes it necessary on engines having this type of combined igniter and magneto, to provide a separate igniter mechanism, so that when it is necessary to use some other source of ignition than the magneto, this special igniter mechanism may be put on the engine. In such igniters the arm 23 or its equivalent is operated directly by the push rod 16.

My invention therefore consists broadly of mounting the trip lever and springs on the igniter casting which renders a special igniter unnecessary in case the magneto is removed; and while I have shown a single casting comprising the igniter body, the arms for supporting the springs and trip lever, and a support for the magneto, I desire to have it understood that the arrangement shown is merely illustrative, as these parts may consist of different pieces suitably fastened together. Other changes may be made as are within the scope of the appended claims.

Having thus described my invention, I claim:

1. In an ignition device, an igniter body having a flanged portion adapted to be secured to an engine cylinder, a projection on said body, a trip lever, a support for said trip lever mounted on said projection, a fixed and a movable electrode carried on the igniter body in position to enter the combustion chamber of the engine cylinder when in place, actuating means for said movable electrode extending through the igniter body into operative relation with the trip lever, a part of said trip lever adapted to be engaged and moved by a moving part of the engine, and spring means for returning the trip lever and operating the said movable electrode after initial actuation by the engine part, all in combination with a magneto removably supported by said projection and detachable connecting means between the rotor of said magneto and said trip lever.

2. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, a trip lever between said arms, spring means carried on the flange of said igniter tending to normally hold the rotor in a given position, spring means of less tension than the first mentioned means and operating on the first mentioned arm to hold the same in engagement with the trip lever, and means for actuating the trip lever.

3. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a spring connected with the arm, a generator having a rotor, an arm on the rotor, a trip lever operable independently of said generator, a push rod for operating said trip lever, and springs holding said trip lever in a predetermined position, whereby said generator with its operating arm may be removed from the action of said trip lever without affecting the action of same in relation to said movable electrode, substantially as described.

4. An ignition device comprising a casting supporting a suitable generator, a make-and-break igniter and spring controlled means for operating said generator and igniter, and a loose coupling between said spring controlled means and said generator whereby the generator may be removed or replaced in relation to said operating means without affecting the operation of the latter, substantially as described.

5. An ignition device comprising a body portion carrying igniter mechanism, a flange on said body whereby same may be supported on an engine, means projecting from said flange for operating said igniter mechanism, a trip lever supported by said flange, anchor posts carried by the flange

and positioned at opposite sides of the trip lever, tension means between said posts and trip lever, and means between said trip lever and igniter mechanism whereby said mechanism may be operated by said tension means.

6. An ignition device comprising a body portion carrying igniter mechanism, a flange on said body whereby same may be supported on an engine, means projecting from said flange for operating said igniter mechanism, a trip lever, anchor posts carried by the flange and positioned at opposite sides of the trip lever, tension means between said post and trip lever, a generator, and means between said generator, igniter operating means, and trip lever whereby said generator and igniter mechanism may be operated by the action of said tension means.

7. An ignition device for internal combustion engines comprising an igniter body carrying a mechanically operated igniter contact adapted to be mounted on an engine with the igniter contact projecting into the combustion chamber thereof, a trip lever mounted on the igniter body in operative relation to the said mechanically operated igniter, and a retractile spring connection between said trip lever and said igniter body, together with means for removably supporting a magneto in operative relation to the trip lever comprising a bracket carried by the igniter body, and means for transmitting motion from the trip lever to the magneto.

8. An ignition device for internal combustion engines comprising an igniter body carrying a mechanically operated igniter contact and adapted to be mounted on an engine cylinder with the igniter contact within the combustion chamber thereof, a magneto, a trip lever, tension means connecting said trip lever with the igniter body independent of the magneto, and means for transmitting motion from the trip lever to each of said igniter contact and said magneto.

9. An ignition device for internal combustion engines comprising an igniter body carrying a movable igniter contact and adapted to be mounted on an engine cylinder with the igniter contact projecting into the combustion chamber thereof, a trip lever and retractile means therefor mounted on the igniter body in operative connection with said movable igniter contact, a bracket carried by the igniter body for removably supporting a magneto, and loose coupling means for operatively connecting said trip lever with a magneto when supported on said bracket.

10. An ignition device for internal combustion engines comprising an igniter body carrying a movable igniter contact and

adapted to be mounted on an engine with the igniter contact projecting into the combustion chamber of the engine, a bracket carried by the igniter body, a magneto removably mounted on said bracket, a trip lever and retractile means therefor mounted on the igniter body and operable independently of said magneto, means for transmitting motion from said trip lever to the movable igniter contact, and a loose coupling between said magneto and the trip lever carried partly by the magneto and partly by the trip lever.

11. An ignition device for internal combustion engines comprising an igniter body adapted to be mounted on an engine, a bearing in said igniter body carrying a movable igniter contact so positioned as to project into the ignition chamber of an engine when the said body is mounted thereon, another bearing on said igniter body carrying a trip lever, a magneto mounted on the igniter body, an operating shaft for said magneto mounted in bearings distinct from said first mentioned bearings, and means for transmitting motion from said trip lever to each of said igniter contact and said operating shaft.

12. An ignition device for internal combustion engines comprising an igniter body carrying a movable electrode and adapted to be mounted on an engine with the igniter contact projecting into the combustion chamber thereof, a trip lever, a magneto and an operating shaft therefor, separate and independent bearings for the movable electrode, the trip lever, and the magneto shaft, and means for transmitting motion from said trip lever both ways to the movable electrode and the magneto shaft.

13. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an oscillatory member mounted on the bracket, means driven by the engine for operating said member, an igniter carried by the bracket and disposed within the combustion chamber of the engine, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said member, and devices for removably supporting the magneto to the bracket, said igniter being controlled by the oscillatory member whereby the igniter may be operated without the magneto.

14. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an oscillatory member mounted on the bracket, means driven by the engine for operating said member, an igniter carried by the bracket and disposed within the combustion chamber of the engine, a magneto consisting of a rotor and a field magnet, the rotor being detachably connected with said member, and

oscillatory member, whereby the igniter may be operated without the magneto.

23. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an oscillatory member mounted on the bracket, means driven by the engine for operating said member, a make and break igniter carried by the bracket and disposed within the combustion chamber of the engine, spring means carried by the bracket tending to hold the oscillatory member in a given position, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said member, and devices for removably supporting the field magnet of the magneto from the bracket, said igniter being controlled by the oscillatory member, whereby the igniter may be operated without the magneto.

24. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an oscillatory member mounted on the bracket, means driven by the engine for operating said member, an igniter carried by the bracket and disposed within the combustion chamber of the engine, spring means carried by the bracket tending to hold the oscillatory member in a given position, a magneto consisting of a rotor and a field magnet, the rotor being detachably connected with said member, and devices for removably supporting the magneto from the bracket, said igniter being controlled by the oscillatory member, whereby the igniter may be operated without the magneto.

25. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an oscillatory member mounted on the bracket, means driven by the engine for operating said member, a make and break igniter carried by the bracket and disposed within the combustion chamber of the engine, spring means carried by the bracket tending to hold the oscillatory member in a given position, a magneto consisting of a rotor and a field magnet, the rotor being detachably connected with said member, and devices for removably supporting the field magnet of the magneto from the bracket, said igniter being controlled by the oscillatory member, whereby the igniter may be operated without the magneto.

26. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an oscillatory member mounted on the bracket, means driven by the engine for operating said member, a make and break igniter carried by the bracket and disposed within the combustion chamber of the engine, spring means carried by the bracket tending to hold the oscillatory member in a given position, a

magneto consisting of a rotor and a field magnet, the rotor being detachably connected with said member, and devices for removably supporting the magneto from the bracket, said igniter being controlled by the oscillatory member, whereby the igniter may be operated without the magneto.

27. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an operating shaft journaled in the bracket, means driven by the engine for operating the shaft, an igniter carried by the bracket and disposed within the combustion chamber of the engine, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said shaft, and devices for removably supporting the magneto from the bracket, said igniter being actuated by said shaft, whereby the igniter may be operated without the magneto.

28. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an operating shaft journaled in the bracket, means driven by the engine for operating the shaft, an igniter, carried by the bracket and disposed within the combustion chamber of the engine, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said shaft, and devices for removably supporting the field magnet of the magneto from the bracket, said igniter being actuated by said shaft, whereby the igniter may be operated without the magneto.

29. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an operating shaft journaled in the bracket, means driven by the engine for operating the shaft, a make and break igniter carried by the bracket and disposed within the combustion chamber of the engine, a magneto consisting of a rotor and field magnet, the rotor being operatively connected with said shaft, and devices for removably supporting the magnet from the bracket, said igniter being actuated by said shaft, whereby the igniter may be operated without the magneto.

30. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an operating shaft journaled in the bracket, means driven by the engine for operating the shaft, a make and break igniter carried by the bracket and disposed within the combustion chamber of the engine, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said shaft, and devices for removably supporting the field magnet of the magneto from the bracket, said igniter being actuated by said shaft, whereby the igniter may be operated without the magneto.

31. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an operating shaft journaled in the bracket, means driven by the engine for operating the shaft, an igniter carried by the bracket and disposed within the combustion chamber of the engine, spring means carried by the bracket tending to hold the shaft in a given position, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said shaft, and devices for removably supporting the magneto from the bracket, said igniter being actuated by said shaft, whereby the igniter may be operated without the magneto.

32. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an operating shaft journaled in the bracket, means driven by the engine for operating the shaft, an igniter carried by the bracket and disposed within the combustion chamber of the engine, spring means carried by the bracket tending to hold the shaft in a given position, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said shaft, and devices for removably supporting the field magnet of the magneto from the bracket, said igniter being actuated by said shaft, whereby the igniter may be operated without the magneto.

33. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an operating shaft journaled in the bracket, means driven by the engine for operating the shaft, a make and break igniter carried by the bracket and disposed within the combustion chamber of the engine, spring means carried by the bracket tending to hold the shaft in a given position, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said shaft, and devices for removably supporting the magneto from the bracket, said igniter being actuated by said shaft, whereby the igniter may be operated without the magneto.

34. A device of the class described, comprising a bracket adapted to be secured to an internal combustion engine, an operating shaft journaled in the bracket, means driven by the engine for operating the shaft, a make and break igniter carried by the bracket and disposed within the combustion chamber of the engine, spring means carried by the bracket tending to hold the shaft in a given position, a magneto consisting of a rotor and a field magnet, the rotor being operatively connected with said shaft, and de-

vices for removably supporting the field magnet of the magneto from the bracket, said igniter being actuated by said shaft, whereby the igniter may be operated without the magneto.

35. In an ignition device, an igniter with fixed and movable electrodes, a bracket, a magneto supported on said bracket, operating means for said magneto adapted to be actuated intermittently by a moving part of an engine to which the igniter is attached, a pair of horns or posts secured to the said bracket, and spring means extending from said horns or posts normally tending to maintain the movable member of the magneto in a fixed and determinate position and to return the same thereto when actuated by said movable engine part.

36. In an ignition device, an igniter with fixed and movable electrodes, a bracket, a magneto detachably supported on said bracket, operating means for said magneto adapted to be actuated intermittently by a moving part of an engine to which the igniter is attached, a pair of horns or posts secured to the said bracket, and spring means extending from said horns or posts normally tending to maintain the movable member of the magneto in a fixed and determinate position and to return the same thereto when actuated by said movable engine part.

37. In ignition apparatus, an igniter body carrying fixed and movable electrodes, a bracket secured to said body, a magneto generator detachably supported on the bracket, and operating means for the movable electrode of the igniter adapted to be actuated by a moving part of the engine, and to be alternatively connected so as to operate the movable electrode and magneto simultaneously for magneto ignition, or the movable electrode without the magneto, for battery ignition.

38. In combination, a bracket adapted to be secured to an engine cylinder, a movable electrode journaled in said bracket and adapted to project within the engine cylinder, a magneto removably supported by said bracket, spring actuated means for oscillating the electrode and the rotor of the magneto, said means being arranged to maintain operative relation with the electrode, when the magneto is removed.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

HARRY RANDOLPH VAN DEVENTER.

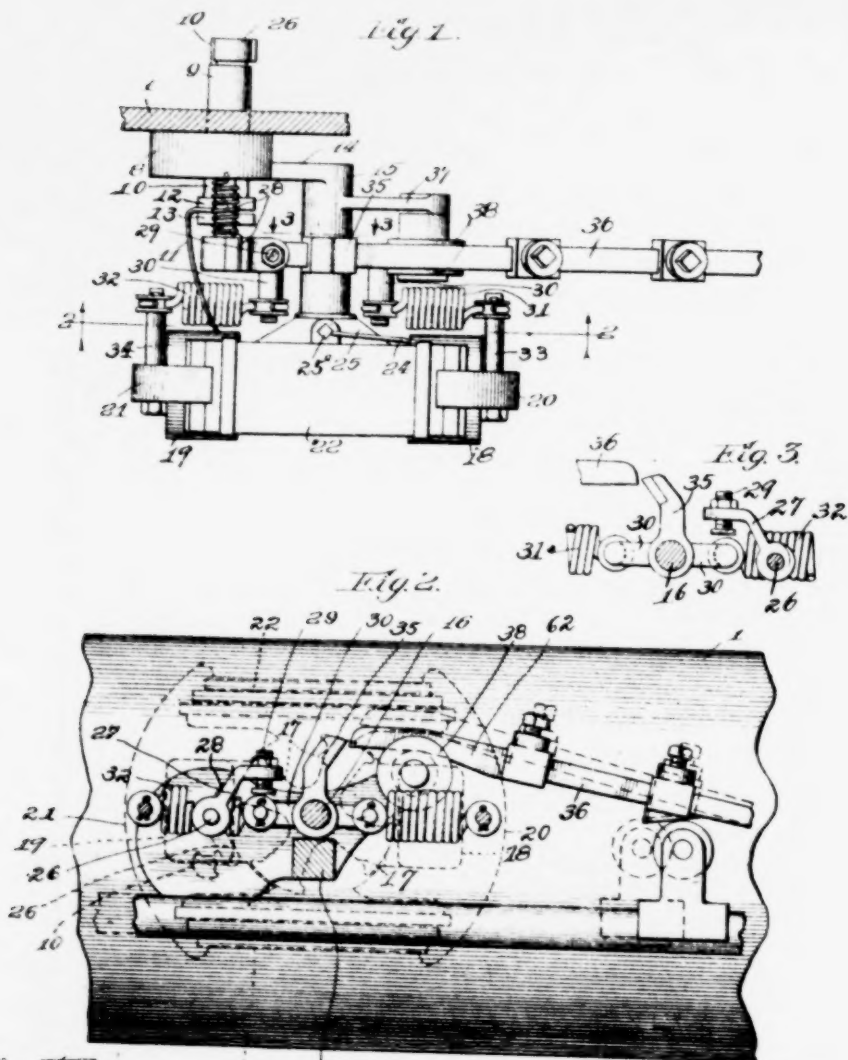
Witnesses:

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ELECTRIC IGNITER.
APPLICATION FILED JAN. 14, 1915

1,280,105.

Patented Sept. 24, 1918.



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UNITED STATES PATENT OFFICE.

EDMUND JOSEPH KANE, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE ASSIGNMENTS, TO WEBSTER ELECTRIC COMPANY, OF RACINE, WISCONSIN, A CORPORATION OF WISCONSIN.

ELECTRIC IGNITER.

1,280,105. Specification of Letters Patent. Patented Sept. 24, 1918.

Original application filed February 2, 1910, Serial No. 541,428. (Patent No. 1,204,573.) Divided and this application filed January 14, 1915. Serial No. 2,097.

To all whom it may concern:

Be it known that I, EDMUND JOSEPH KANE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Igniters, of which the following is a specification.

My invention relates to magneto generators for ignition systems of explosive engines, and this application is a division of my prior application for electric igniters for explosive engines, filed February 2, 1910, Serial Number 541,428.

The object of my invention is to provide a simple and efficient device of the character mentioned. A further object is to reduce wear and hammering of the electrical make-and-break contacts, and other parts of the generator.

My improvement consists in substantially the combination and arrangement of parts hereinafter described, shown in the accompanying drawing forming a part of this specification, and more particularly specified in the subjoined claims.

In the drawing:

Figure 1 is a top view of a magneto generator, shown as attached to fragments of an explosive engine, and embodying my invention.

Fig. 2 is a section taken on line 2—2 of Fig. 1, but showing a larger portion of the cylinder of the engine than in Fig. 1, and showing parts of the magneto cut away in broken lines, and

Fig. 3 is a fragmentary view of a portion of the device taken as on line 3—3, in Fig. 1.

My invention is particularly adaptable to the type of magneto generators employing an oscillatory armature or inductor, and in connection with the make-and-break type of ignition systems.

In the drawing, an explosive engine 1, fragments of which are shown, is provided with a suitable opening for the ignition points of a make-and-break system, and around this opening, on the outer side of the cylinder wall, is an ignition block 8, provided with an extension 9 extending through said opening into the cylinder. At the inner end of the extension 9 is carried the fixed contact 10 of the make-and-break system. Electrode 10 is mounted in block 8 and

insulated therefrom in the usual manner, such insulation not being shown. At the outer end of the contact member 10 is secured a conductor wire 11, between nuts 12 and 13.

On block 8 is an arm 14 having a bearing member 15 at its outer end. In the bearing member is journaled a shaft 16, which carries the armature or inductor 17. The inductor 17 rotates between the field-cores 18 and 19. The cores 18 and 19 are provided with suitable electrical windings and formed on the pole pieces 20 and 21, and the latter are joined by fixed magnets 22 and 23. The pole pieces 20 and 21 are carried on supporting block 25 which is secured by set screw 25^a to the bearing member or bracket on or in which the magneto generator is mounted, thus rendering the magneto generator proper, detachable from its firm supporting base, shelf or bracket formed integrally with ignition block or plug 8 as described.

One end of the conductor 11 is connected to or is part of the winding on pole-core 19, and the latter is connected to the winding on pole-core 18 in the usual manner, and is not specifically shown. The other end 24 of the winding on pole-core 18 is secured to the supporting block 25 at the set screw 25^a or other suitable fastening means to ground the circuit in the framework of the magneto. A movable contact 26 is adapted to cooperate with fixed contact 10, and is provided with a portion extending through block 8, and in electrical contact therewith. On the outer end of the portion 26 which extends through and beyond block 8 is fixed an arm 27, and on the extended portion of part 26 is mounted a torsion spring 28 with one end engaging block 8, and the other end engaging arm 27 in a manner to cause contacts 26 and 10 to normally remain in contact. In the free end of arm 27 is threaded an anvil 29. The anvil 29 is adjustably mounted in the free end of arm 27, so that timing of the engine may be varied slightly by such adjustments.

Secured on the shaft 16 is a yoke member 30, having two arms extending in opposite directions from shaft 16, with one of the arms 30 positioned at one end of anvil 29, and adapted, upon oscillation of shaft 16, to cause movement of the anvil to open the con-

tacts 26—10, as will be described later. The arms of member 30 are provided with lateral extensions which are connected to tension springs 31 and 32, said springs being secured at their other ends to brackets 33 and 34 on pole pieces 20 and 21, so that the tension of springs 31 and 32 normally maintains the arm member 30 in a position so that one of its arms is in striking relation to the anvil 29, the position of the anvil varying obviously with its described adjustment. On the member 30 is an actuating arm 35 adapted to be engaged by a plunger 36. The plunger 36 is actuated from the crank shaft of the engine, not shown. The end of plunger rod 36 which engages arm 35 is mounted on a flanged roller 38, and the latter journaled on an arm 37 formed on bearing member 15. The plunger 36 is provided with a wedged member or inclined cam surface on member 62, so that upon longitudinal movement of the plunger, the latter will engage arm 35 to oscillate member 30 and arm 35, and after riding on the cam surface will be raised from the arm 35, permitting springs 31 and 32 to restore member 30 to its normal position. Owing to the elasticity of springs 31 and 32 and the momentum of member 30, the latter will be carried slightly past its normal position, and engage anvil 29 and rock contact member 26 away from contact 10 to open the electric circuit. This opening of the circuit produces the spark for igniting the engine.

By referring to the preferred embodiment of my invention as depicted in the drawing it will be seen that the single spring 28 is, due to the manner of its connection with the movable electrode shaft and the igniter block 8, of the torsional class of springs, while the multiple springs 31, 32, acting cumulatively upon the oscillating yoke member, 30 are tension springs exerting their combined elastic resistance to tension upon yoke member 30 whenever it is oscillated from its normal position of rest. Furthermore, while torsion spring 28 is shown formed of a much smaller grade of spring wire than the multiple tension springs 31, 32, it will also be obvious that its relative tensional relation to the combined springs 31, 32 will be greatly diminished by the system of leverages disclosed in the drawings of these associated parts. For example, torsion spring 28 must exert its reaction upon anvil lever 27 at a point relatively close to the fulcrum of this lever while the combined tension of springs 31 and 32 is exerted upon the outer extremities of yoke 30, one of which parts also forms the striker and comes in direct contact with the anvil 29 on arm 27, so that there is no loss of the reacting power of this pair of springs. This multiplies the effectiveness of springs 31, 32 over the torsion spring 28 many times, with the result that in the combination of these elements shown in the

drawing the reaction of the combined rotor springs is controlling, and when the momentum of the rotor carries it over center obviously the less effectively arranged single spring 28 will yield allowing the igniter points to separate, but closing them quickly when the rebounding effect of the rotor yoke is withdrawn.

In practice, I prefer to adjust the anvil 29, which as shown in the drawings, is of an old and well known form to those skilled in this art, in relation to movable electrode arm 27 and the striking part of the yoke 30, so that when the yoke is at rest it will not influence the position of the movable electrode arm 27 with the result that normally the electrode points will be in contact, which as well known to those skilled in this art, is desirable in keeping the contact points of the electrodes free from deposits of carbon or other substances on the interior of the engine cylinder that may interfere with the free discharge of the ignition spark between the contacts. An obvious adjustment, however, of anvil 29 to precisely close the normal gap between it and yoke 30, as shown, for example in Figs. 2 and 3, will not change the described mode of operation of the igniter points, but if the anvil be still further adjusted toward the yoke after the gap disappears, obviously the anvil 27 will rest normally in contact with the yoke and the igniter points will be normally separated by the increased leverage of springs 31, 32 over spring 28, to be closed momentarily when the rotor yoke is rocked or cocked away from it and afterward quickly separated by the rebound impact of the yoke on its release from operating plunger 36.

The portion of member 30 which engages the bottom of anvil 29 is preferably rounded or curved, in order to effect uniform movement of the arm 27 during the time the member 30 is in contact with anvil 29. The field pieces and inductor are not shown in detail, since their specific parts are not part of this invention. Any suitable field pieces or inductor may be used, as desired.

While I have illustrated and described the preferred form of my invention, I do not desire to be limited to the precise details and arrangement set forth, but desire to avail myself of such variations and changes as may come within the scope of the appended claims.

I claim:

1. In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the yoke when the yoke is swung in the opposite direction.

permit the oscillating parts to return to their normal position. spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

2. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with the yoke, and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on

said contacts in opposition to the tension of the said light spring.

4. In a device of the class described, the combination of a field magnet, an inductor 70 mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, 75 a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting 80 the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said 85 contacts to create an ignition spark within the combustion chamber of the engine.

5. In a device of the class described, a field 90 magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, 95 the end of the reciprocating rod adapted normally to engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and an impact member fixed 100 relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

6. In a device of the class described, a field 105 magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the field magnet, a yoke mounted upon said shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for 110 oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation 115 of said contacts to create an ignition spark in the combustion chamber of the engine.

7. In an electrical ignition device for internal combustion engines, the combination 120 of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, 125 mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, a rigid unitary and integral support upon which all of the aforesaid parts 130

are mounted, whereby all of said parts may be removed from and returned to their position upon an engine cylinder without disturbing their relations one to another, conductors for carrying electric current from said generating winding to said electrodes, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it.

8. In an electrical ignition device for internal combustion engines, the combination of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, a supporting member upon the several parts of which all of the afore-

said mechanism is mounted and having a single integral part adapted to be attached to the engine, whereby all of said mechanism may be removed from the engine by removing said single integral part and may be returned to its position upon the engine with unchanged relations between any and all of the parts of all of said mechanism, thereby insuring the predetermined synchronism and interrelated adjustment of said mechanism when it is replaced upon the engine, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 11th day of January, A. D. 1915.

EDMUND JOSEPH KANE.

Witnesses:

ARTHUR L. SPRINKLE,
THOMAS COLSON.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

UNITED STATES CIRCUIT COURT OF APPEALS

For the Seventh Circuit.

I, Edward M. Holloway, Clerk of the United States Circuit Court of Appeals for the Seventh Circuit, do hereby certify that the foregoing pages, numbered from 1 to 936, inclusive, contain a true copy of the printed book of exhibits which together with the printed record constitutes the record upon which the following cause was heard and determined

Splitdorf Electrical Company

vs.

Webster Electric Company

No. 2769, October Term, 1921, as the same remains upon the files and records of the United States Circuit Court of Appeals, for the Seventh Circuit.

In testimony whereof I hereunto subscribe my name and affix the seal of said United States Circuit Court of Appeals for the Seventh Circuit, at the City of Chicago, this twenty-fifth day of July, 1922.

(Seal)

EDWARD M. HOLLOWAY,
*Clerk of the United States Circuit Court of
Appeals for the Seventh Circuit.*

WRIT OF CERTIORARI AND RETURN

[Filed Dec. 13, 1922]

UNITED STATES OF AMERICA, *ss:*

[Seal of the Supreme Court of the United States.]

The President of the United States of America to the Honorable the Judges of the United States Circuit Court of Appeals for the Seventh Circuit, Greeting:

Being informed that there is now pending before you a suit in which Splitdorf Electrical Company is appellant, and Webster Electric Company is appellee, which suit was removed into the said Circuit Court of Appeals by virtue of an appeal from the District Court of the United States for the Northern District of Illinois, and we, being willing for certain reasons that the said cause and the record and proceedings therein should be certified by the said Circuit Court of Appeals and removed into the Supreme Court of the United States, do hereby command you that you send without delay to the said Supreme Court as aforesaid, the record and proceedings in said cause, so that the said Supreme Court may act thereon as of right and according to law ought to be done.

Witness the Honorable William H. Taft, Chief Justice of the United States, the twenty-sixth day of October, in the year of our Lord one thousand nine hundred and twenty-two.

Wm. R. Stansbury, Clerk of the Supreme Court of the United States.

UNITED STATES OF AMERICA,
Seventh Circuit, ss:

In obedience to the command of the foregoing writ of certiorari and in pursuance of the stipulation of the parties, a full copy of which is hereto attached, I do hereby certify and return that the transcript of the record filed with the application to the Supreme Court of the United States for a writ of certiorari, and Defendant's Exhibit 56 attached to the said stipulation certified herewith, in the case of Splitdorf Electrical Company, appellant, versus Western Electric Company, appellee, is a full, true and complete transcript of the record upon which said cause was heard in the United States Circuit Court of Appeals for the Seventh Circuit, together with all proceedings in said court.

In testimony whereof, I hereunto subscribe my name and affix the seal of said United States Circuit Court of Appeals for the Seventh Circuit, at the city of Chicago, this eleventh day of December, A. D. 1922.

Edward M. Holloway, Clerk of the United States Circuit Court of Appeals for the Seventh Circuit. [Seal of United States Circuit Court of Appeals, Seventh Circuit.]

'e endorsement omitted.]

In the United States Circuit Court of Appeals for the Seventh Circuit,
October Term, A. D. 1922

No. 2769

SPLITDORF ELECTRICAL COMPANY, Appellant,

vs.

WEBSTER ELECTRIC COMPANY, Appellee.

STIPULATION

It is hereby stipulated that the record in this cause, heretofore certified to the Supreme Court and now on file in the office of the Clerk of the Supreme Court, together with the attached copy of the transcript of record in the Kane vs. Podlesak interference (defendant's Exhibit 56), may be taken as a return to the Writ of Certiorari issued by the Supreme Court on October 26, 1922.

It is expressly understood and agreed that the aforesaid interference record shall be included in the printed record in the Supreme Court.

It is further stipulated that except for the interference record aforesaid, each party may retain its physical exhibits until the date of the argument in the Supreme Court.

Edward Rector, Of Counsel for Splitdorf
Electrical Co. Lynn A. Williams,
Albert G. McCaleb, Herbert B. Moses,
Counsel for Webster Electric Co.

Endorsed: Filed Dec. 4, 1922. Edward M. Holloway, Clerk.

DEFENDANT'S EXHIBIT 56

Transcript of Record

Court of Appeals of the District of Columbia, October Term, 1917

Patent Appeal Docket, No. 1147

EDMUND J. KANE, Appellant,

vs.

EMIL PODLESAK.

Appeal from the Commissioner of Patents

(Interference No. 39,181)

Filed September 20, 1917; Printed November 2, 1917.

Court of Appeals of the District of Columbia

Patent Appeal Docket, No. 1147

EDMUND J. KANE, Appellant,

vs.

EMIL PODLESAK.

In the Court of Appeals of the District of Columbia,

No. 1147, Patent Appeal Docket

Interference No. 39181

EMIL PODLESAK

vs.

EDMUND J. KANE.

To the Court of Appeals of the District of Columbia:

Your petitioner, Edmund Joseph Kane, of Chicago, in the County of Cook and State of Illinois, respectfully represents:

That he is the original and first inventor of certain new and useful improvements in Electric Igniters (erroneously designated as Electric Lighters); that on the 14th day of January, 1915, in the manner prescribed by law, he presented his application to the Patent Office (as a division of his parent application filed in the Patent

Office on the 2nd day of February, 1910, serial No. 541,428) praying that a patent be issued to him for the said invention;

That thereafter, to-wit, on the 20th day of October, 1915, an interference proceeding was instituted and declared between his said application and a reissue patent No. 13,878, issued and patented on the 9th day of February, 1915 (original patent No. 1,055,076, dated March 4, 1913) to Emil Podlesak of Racine, Wisconsin (the application for which said original patent was filed in the Patent Office on the 15th day of April, 1912) for a similar invention;

That the subject matter of said interference, as set forth in the official declaration, was as follows:

Count 1. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first mentioned means and operating on the first mentioned arm to hold the same in engagement with the second mentioned arm, and a trip device for actuating the rotor.

Count 2. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first mentioned means, and operating on the first mentioned arm to hold the same in engagement with the second mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

Count 3. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

Count 4. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first mentioned means operating on the first mentioned arm to hold the same in engagement with the second mentioned arm, an integral bracket upon and in which all of the aforesaid device is mounted, and a trip device for actuating the rotor.

Count 5. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first mentioned means, operating on the first mentioned arm to hold the same in engagement with the second mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable

electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shaft extending laterally therefrom and integral therewith, upon which the said generator is mounted, and a trip device for actuating the rotor.

Count 6. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted, and shelf laterally extending therefrom and upon which the said generator is mounted.

Count 7. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing said two arms into engagement; and a trip finger on the rotor.

Count 8. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

Count 9. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

That thereafter the said Emil Podlesak moved to dissolve the aforesaid interference, and that thereafter, to-wit, on the 22nd day of March, 1916, the Law Examiner of the Patent Office rendered his decision denying the said motion to dissolve:

That thereafter, to-wit, on the 24th day of March, 1916, the Ex-

aminer of Interferences of the Patent Office rendered his decision, based upon the record (no testimony having been presented by either party to the said interference) awarding priority of invention to Edward Joseph Kane, the senior party:

That pursuant to the statutes and the Rules of Practice in the Patent Office in such case made and provided, the said Emil Podlesak appealed from the said adverse decision of the Examiner of Interferences to the Board of Examiners-in-Chief, and the case having been argued and submitted to said Board, a decision was rendered by said Board on or about the 15th day of January, 1917, reversing the decision of the Examiner of Interferences and awarding priority of invention to the said Emil Podlesak, the junior party;

That thereafter, pursuant to said statutes and rules, the said Edmund Joseph Kane appealed from the said adverse decision of the Board of Examiners-in-Chief to the Commissioner of Patents, as to counts 4 to 9 inclusive of the said declaration of interference, and the same coming on to be heard and having been argued and submitted, a decision was, on or about the 18th day of June, 1917, rendered by the Commissioner adverse to your petitioner, affirming and sustaining the decision of the Board of Examiners-in-Chief and awarding priority of invention to the said Emil Podlesak;

That on or about the 6th day of August, 1917, your petitioner, pursuant to Sections 4912 and 4913, Revised Statutes, United States, gave notice to the Commissioner of Patents of his appeal to this Honorable Court from his decision awarding priority of invention to said Emil Podlesak as aforesaid, and filed with him in writing the following reasons of appeal:

1. That the said Commissioner erred in holding Emil Podlesak to be the original and first inventor of counts 4 to 9 inclusive of the issue of the said interference;

2. That the said Commissioner erred in not awarding priority of invention to Edmund J. Kane, as to counts 4 to 9 inclusive of the issue of the said interference;

3. That the said Commissioner erred in finding and holding that the subject matter of counts 4 to 9 inclusive of the issue of the said interference are not disclosed in the application of the said Edmund J. Kane.

That the Commissioner of Patents has furnished your petitioner a certified transcript of the record and proceedings relating to said interference case, which transcript is filed herewith and is to be deemed and taken as a part hereof.

Wherefore your petitioner prays that his said appeal may be heard upon and for the reasons assigned therefor to the Commissioner as aforesaid, and that said appeal may be determined and the decision of the Commissioner be revised and reversed that justice may be done in the premises.

Edmund Joseph Kane and Webster Electric Company, (as Assignee), By Williams & Bradbury, His and Their Attorneys. Lynn A. Williams, Solicitor and of Counsel.

2-390

United States of America,
 Department of the Interior,
 United States Patent Office.

To all to whom these presents shall come, Greeting:

This is to certify that the annexed is a true copy from the Records of this Office of Certain Papers, including printed testimony as used before the Office, in the matter of Interference Number 39181, Igniters†

Podlesak vs. Kane, Subject-Matter:—Electric [Lighters];* said Papers being the Record for the Court of Appeals of the District of Columbia.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington, this 17th day of September, in the year of our Lord one thousand nine hundred and seventeen and of the Independence of the United States of America the one hundred and forty-second.

F. W. H. Clay, Acting Commissioner of Patents. [Seal Patent Office, United States of America.]

\$30, C'k, Received Dec. 18, 1914. G. Chief Clerk, U. S. Patent Office

878,726

PETITION FOR A RE-ISSUE

To the Commissioner of Patents:

Your petitioner, Emil Podlesak, a citizen of the United States and a resident of Racine, in the county of Racine and State of Wisconsin, formerly residing at the City of Tiffin, in the State of Ohio, whose post-office address is Racine, Wisconsin, prays that he may be allowed to surrender the Letters Patent for an improvement in Current Generators and Igniters for Internal Combustion Engine granted to him March 4, 1913, whereof he is now sole owner and that Letters Patent may be reissued to him for the same invention upon the annexed amended specification; and he hereby appoints Lynn A. Williams, (Reg. No. 5520) of Monadnock Block, Chicago, Illinois, his attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent Office connected therewith. With this petition is filed an abstract of title, duly certified, as required in such cases.

[*Words and figures enclosed in brackets erased in copy.]

[†In pencil in copy.]

Signed at Racine, in the County of Racine, and State of Wisconsin, this 14th day of October, 1914.

Emil Podlesak.

(Revenue Stamp.)

To all whom it may concern:

Be it known that I, Emil Podlesak, a citizen of the United States, residing at Tiffin, in the County of Seneca and State of Ohio, have invented certain new and useful Improvements in Current-Generators and Igniters for Internal Combustion Engines, of which the following is a specification.

This invention relates to igniters of the make and break type and in which the magnetic or current generator is combined therewith as a unitary structure that is fastened to the head or other suitable part of the engine cylinder, the rotor of the generator being operatively connected with the movable electrode of the igniter so that a reciprocatory actuator, push rod or equivalent means operating on the rotor trip finger against the tension of spring means causes the rotor to move to "cocked" position while the electrodes of the igniter are brought together, and then released from such "cocked" position so that the electro-motive force generated by the sudden return movement of the rotor through the magnetic field of the generator will produce the igniting current whereby the spark is produced between the electrodes in the compression chamber of the engine. The combination of means and instrumentalities above referred to is the subject-matter of my pending application for Letters Patent of the United States, Serial No. 668,153, filed December 27, 1911, and the present invention relates to improvements especially adapted for combined igniters and generators of the type referred to.

The actuating means for the rotor and movable electrode is mounted on the engine cylinder or other suitable part and is operatively connected with some moving mechanism and has no connection with the magneto or igniter, since the actuator, which may be a push rod, rotating or oscillatory arm or the like, merely contacts with the trip finger of the rotor. As the igniter and generator must be removed from time to time for cleaning the electrodes and other reasons, it is of great importance that the igniter and generator be replaced in exactly the same position it was before removal; otherwise, the push rod will not be disposed in proper relation to the trip finger of the rotor to accomplish satisfactory results in the operation of the engine, generator and igniter. The reason for this liability of the igniter being replaced in a different position from that which it originally occupied when all the operating parts, were adjusted to accomplish the best results, is due to the fact that the holes in the body of the igniter for receiving the bolts or fastening studs are made larger than the bolts or studs, as is also the opening in the engine cylinder for receiving the body of the igniter, this "latitude" between the parts being provided so as to facilitate easy removal of the igniter and to obviate the necessity of careful and expensive machining and fitting of the parts. By reason of the liability to error in

replacing the igniter, there is provided an arm or equivalent means on the igniter body to inter-engage with a fixed part on the engine cylinder, so that there can be but one position in which the igniter can be attached to the cylinder, and that position is the one where the push rod or other actuator is in proper relation to the trip finger of the rotor. As the result of this arrangement, it is never necessary to adjust the relation of the various instrumentalities in replacing the igniter when it has been removed for cleaning or any other purpose.

In addition to the foregoing objects and advantages, the invention has certain other minor advantages which will appear hereinafter as the description proceeds in reference to the accompanying drawings, in which

Figure 1 is a front view of the combined igniter and current generator applied to the head of an engine cylinder, part of the generator being shown in section. Fig. 2 is a front view thereof showing a portion of the cylinder head in section. Fig. 3 is a sectional view on line 3—3, Fig. 2. Fig. 4 is a diagrammatic view to show the results of a defective positioning of the igniter with respect to the operating push rod.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawings, A designates the head or other wall of a cylinder of an internal combustion engine; B, the make and break igniter; and C, the magneto current generator of the inductor type.

The igniter B comprises a cylindrical body 1 which passes through an opening 2 in the cylinder head A, the opening being of slightly larger diameter than the diameter of the igniter body, so that the latter can be easily inserted or removed. Passing through the igniter body is a fixed electrode 3 with which cooperates a movable or rocking electrode 4. The outer end of the igniter body is formed with a rhomboidal plate 5, which, as shown in Fig. 1, has bolt-receiving openings 6 that are slightly larger in diameter than the fastening bolts or studs 7 that pass through the openings and are fastened to the cylinder head A. Thus, there is considerable latitude allowed between the body of the igniter on the one hand and the cylinder head and fastening bolts on the other, and by reason of this, the igniter body is liable to be fastened to the cylinder head in a variety of positions within the limit of this latitude, the disadvantages of which have been hereinbefore pointed out, but are overcome by the improvements later to be set forth.

Extending from the plate portion 5 of the igniter body is a shelf or bracket 8 which forms a base to which the generator C is removably secured by stud bolts 9. Projecting laterally from the bracket or shelf 8 is an arm 10 which is formed at its outer extremity with a boss or enlargement 11 that has a passage through which extends an extension rod 12, the rod being fastened in any desired position by a set screw 13 or equivalent means. The outer extremity of this extension rod is located at a considerable distance from the axis of the igniter and this extremity is adapted to engage some fixed part of the engine, such for instance as lugs 14 on the arm 15 in

which the operating shaft 16 rotates. The lugs 14 are spaced apart far enough for the extension rod to enter between them as the igniter body is inserted in the opening in the engine cylinder, and when thus positioned, it is impossible for the igniter body to shift angularly or around its axis and thereby disturb the proper relation of the igniter and generator operating means. The parts 10, 12 and 14 thus constitute means for insuring the proper positioning of the igniter and the design of the parts is such that no special care or adjustment is required in taking off or replacing the igniter.

The generator C is fully set forth in the pending application hereinbefore referred to, so that only a brief description here is deemed necessary. The generator comprises permanent horseshoe magnets 17 fastened to E-shaped pole pieces 18, on the middle projections of which are generating coils 19. In the present drawings, only one pole piece and coil is shown in Fig 1, the other corresponding parts being concealed from view. Between the pole pieces oscillates a cruciform rotor 20 mounted on a shaft 21 which has at one end oppositely disposed crank arms 22 which are connected with springs 23 that assume an alining position through the axis of the rotor when the latter is idle, the outer ends of the springs being fastened to studs 24 on the generator frame. On the opposite end of the rotor shaft is a trip finger 25 which is adapted to have a wiping engagement with a push rod 26 or other equivalent actuator, which rod has its end opposite from the trip finger connected with the crank pin 27 of the rotating shaft 16. The push rod or actuator has a combined reciprocatory and rocking movement on a bearing pulley 28 journaled on a support 29 which is fastened by a bolt or equivalent means 30 to the arm 10 of the igniter frame, said bolt forming a pivot on which the member 29 can be adjusted to different positions for bringing the free end of the push rod 26 into proper cooperative relation with the trip finger 25. The trip finger has a tail piece on arm 31 which is adapted to be engaged by an arm 32 fastened to the outer end of the movable electrode 4, the arm 32 being held yieldingly against the arm 31 by a helical extension spring 33 which has one end connected with the arm 32 and the other end anchored at 34 on the igniter frame. To obtain the proper set of the sparking points of the electrodes with respect to the rotor of the generator, one arm, such as 32, has an adjustable screw 35 which engages the arm 31. The spring 33 is of less tension than the return springs 23 of the rotor and is sufficient to maintain the arms 31 and 32 in contact during the first part of the cocking movement of the armature and to maintain the electrodes in contact during the final part of such cocking movement, it being understood that the electrodes are normally separated, and that they come into contact before the rotor or armature finishes its cocking movement, or the position of the rotor shown by dotted lines in Fig. 1. At the end of the cocking movement, the push rod 26 slips off the tip of the trip finger, and the springs 23, which have been extended or placed under tension during the cocking movement, quickly snap the rotor back to and beyond its normal position, as indicated by the dot and dash lines, Fig. 1. This quick movement of the rotor quickly changes the path of the

magnetic flux through the pole pieces and rotor, with the result that a high electro-motive force is induced in the generating coils, the maximum electro-motive force occurring at about the time the electrodes are separated during the return movement of the arm 31 of the trip finger, such arm being adapted to strike the arm 32 a hammer blow for effecting a quick separation of electrodes.

By referring to Fig. 4 the effect of a defective positioning of the igniter is clearly depicted. Without the use of the positioning controlling parts 10, 12 and 14, it is possible for the igniter to be secured in either the full line position *a* or dotted line position *b*, because of the latitude provided between the ignited body and the bolts and cylinder wall. In other words, the igniter can be fastened to one side or the other of its true central position to an extent corresponding to the angle *d*. Thus, the trip arm of the rotor 25 would be in the dotted line position *c* when the igniter is in the dotted line position *b*, and as a consequence the push rod 26 would not be long enough to operate the trip finger 25, and furthermore the push rod supporting roller 28 would be raised to the dotted line position *e*, thereby raising the active end of the trip rod above the tip of the trip finger. When the igniter body is in the full line position *a*, the trip finger is shifted to the right and the supporting roller 28 is lowered so that the push rod and trip finger will obviously be in proper position. These contingencies can be guarded against by providing the arm 10 on the igniter body and having some means on the fixed part of the engine to engage such arm, such means being the lugs 14, as in Fig. 1, or a bolt or pin 14^a engaging in the slot 10^a of the arm 10, as in Fig. 4.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, is

1. The combination of an engine cylinder, a make and break igniter, fastening means for securing the igniter in position on the cylinder, an electric generator having its movable element operatively connected with the movable element of the igniter, an actuator for the movable elements of the igniter and generator, said igniter being removable from the cylinder while the actuator remains in place, and means in addition to the said fastening means for insuring the correct positioning of the igniter with respect to the actuator when the former is replaced on the engine after removal and for preventing shifting of the igniter, said latter means comprising engaged parts on the engine cylinder and igniter.

2. The combination of engine cylinder, an igniter, means for removably fastening the igniter on the cylinder, there being sufficient

play between the parts to insure removal of the igniter while rendering the igniter liable to replacement for different positions, an actuator for the igniter requiring a predetermined position of the igniter with respect thereto, and means partly on the igniter and partly on the engine for insuring such predetermined relative position of the actuator and igniter.

3. The combination of an engine cylinder, and igniter and electric generator forming a unitary structure removably mounted on the cylinder, fastening means for the said unitary structure, said structure being liable to replacement in different positions on the cylinder, an actuator for the movable elements of the generator and igniter and operatively connected with the moving part of the engine, and means in addition to the said fastening means for insuring a predetermined relative position of the actuator and movable elements of the igniter and generator, said latter means consisting of relatively fixed parts of the said structure and engine cylinder which inter-engage when the said structure is in proper position.

4. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising a laterally-extending arm on the igniter, and a fixed part on the engine with which the arm is adapted to engage.

5. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising an arm on the igniter, a longitudinally adjustable member on the arm, and a part fixed on the engine with which the said member is adapted to releasably engage.

6. The combination of an engine cylinder, a make and break igniter mounted thereon and liable to assume different positions within certain limits, an actuator for the movable element of the igniter, means for moving the actuator, a laterally-extending arm on the igniter, and means fixed on the engine with which the arm is removably connected to insure such position of the igniter that the actuator and movable electrode will be in proper relation to each other, and means on the arm for supporting the actuator.

7. The combination of an engine cylinder, a make and break igniter removably mounted thereon and liable to assume different positions within certain limits, a generator carried by the igniter and removable therewith as a unitary structure, the movable elements of the igniter and generator being operatively connected, an actuator for the said movable elements, a moving part of the engine with which the actuator remains connected while the igniter and generator are removed, and engaging means between the said structure and engine cylinder for permitting the placing of the latter in only one position.

8. The combination of an engine cylinder having an opening, a make and break igniter secured in the opening and liable to assume

different positions within certain limits, a generator mounted on the igniter and removable therewith, means for operatively connecting the movable elements of the igniter and generator, a push rod, a trip finger connected with one of the movable elements and with which the actuator is adapted to engage, and means arranged partly on the engine and partly on the igniter and generator structure whereby the push rod and trip finger will be in proper relation to each other each time the igniter and generator structure is replaced after removal from the cylinder.

9. The combination of an engine cylinder, an igniter mounted thereon, a generator mounted on the igniter, means for operatively connecting the movable elements of the generator and igniter to move together, a trip finger connected with the said movable elements, an operating shaft, a push rod adapted to engage the trip finger, means for reciprocating the rod by the shaft, and means whereby the igniter and generator structure can be fastened in only one position where the push rod and trip finger are in proper relation to each other, said means comprising a part on the igniter and generator structure and a part on the engine with which the first part is detachably engaged.

10. The combination of an engine, an igniter mounted on the cylinder thereof, a bracket extending from the igniter, a generator on the bracket, means for operatively connecting the movable elements of the generator and igniter together, a trip finger connected with the movable elements, a push rod adapted to wipe on the trip finger, means for actuating the push rod, an arm extending from the bracket, a support on the arm for the trip rod, and means fixed on the engine with which the arm engages whereby the igniter can be replaced on the engine cylinder in only that position in which the trip finger and push rod are in proper relation.

11. The combination of an engine cylinder, an arm extending laterally from the head thereof, a shaft bearing in the arm, a push rod, and a crank pin connection between the shaft and push rod, with an igniter mounted on the engine cylinder and having its movable electrode operatively related to the push rod, an arm extending from the igniter, and means on the arm of the engine cylinder with which the first-mentioned arm detachably engages for permitting the igniter to be attached in only that position where the push rod and movable electrode are in proper relation, and means on the first-mentioned arm for movably supporting the push rod.

12. The combination of an engine cylinder, an igniter and current generator structure removably mounted thereon, the movable elements of the igniter and generator being operatively connected, a trip finger connected with such movable elements, an arm extending from the igniter, means fixed with respect to the engine cylinder for engagement with the arm whereby the said structure can be fastened in only one position on the cylinder, an actuating push rod arranged to engage the trip finger, means for reciprocating the push rod, and an adjustable support mounted on the arm and on which the push rod moves.

13. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

14. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

15. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

16. The combination of an igniter frame, comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion motor, sparking electrodes mounted in said body, a magnetic generator mounted on said base, means for actuating the said generator to generate current, means for actuating one of the electrodes, and means relatively fixed on said motor for engaging said laterally extending arm.

17. The combination of an igniter frame, comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion engine, sparking electrodes mounted in said body and adapted to make and break a circuit within the combustion chamber of the engine, a magneto generator mounted on said base, means for actuating the magneto generator to generate current, means for operating one of the electrodes cooperatively with said generator, a member extensibly mounted in said laterally extending arm, and means secured in relatively fixed relation on the engine to engage said extensible member.

18. In combination, a magneto generator comprising a field magnet, a pair of pole pieces, inductive windings, and a rotor mounted on a shaft, means for cocking said rotor, spring means for suddenly bringing said rotor back upon the release, an igniter frame comprising a body and a shelf extending therefrom and supporting said generator, a stationary insulated electrode and a movable electrode mounted in said body, said movable electrode adapted to make contact with the other said electrode, an arm on said rotor shaft and adapted to cooperate with said arm on movable electrode to so oscillate the movable electrode as to make and break contact with said other electrode, a circuit connecting said windings to said electrodes,

and an arm extending from said igniter frame and adapted to engage on a relatively fixed member on the engine associated with said frame.

19. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

20. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

21. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

22. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

23. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger

on the rotor, and means operable by said motor for actuating the trip finger.

24. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

In witness whereof, I hereunto subscribe my name this 30th day of October, A. D. 1914.

Emil Podlesak. Witnesses: B. R. Beckwith.
H. F. Geist.

OATH.

STATE OF WISCONSIN,

County of Racine, ss:

Emil Podlesak, the above-named petitioner, being duly sworn, deposes and says that he does verily believe himself to be the original, first and sole inventor of the improvement set forth and claimed in the foregoing specification and for which improvement he solicits a patent; that deponent does not know and does not believe that said improvement was ever before known or used; that deponent is a citizen of the United States of America and resided formerly at the City of Tiffin, in the State of Ohio, and now resides at the City of Racine, County of Racine and State of Wisconsin; that deponent verily believes that the Letters Patent referred to in the foregoing petition and specification and herewith surrendered are inoperative for the reason that the specification thereof is defective and insufficient, and that such defect and insufficiency consists particularly in the fact that the words "improperly positioned" in lines 19 and 20 of page 23 of the original specification should read in proper position; the fact that the words "Fig. 9" in lines 26 of page 3 of the original specification should read Fig. 4; the fact that claim 14 of the original patent does not positively include means on one of the arms therein referred to for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor; that claim 15 of the original patent includes as elements, first, a spring connected with the arm, and, second, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, there being in the structure illustrated and described but a single

spring, wherefore there is a duplication or repetition of the elements in the said claim 15; the fact that in line 6 of claim 16 the phrase "in said base" should read on said base; and the fact that the claims contained in the original patent do not cover the whole of the deponent's invention, particularly in failing to claim those combinations of elements set forth in claims 19 to 24, inclusive, of the foregoing specification; and deponent further says that the errors which render such patent so inoperative arose from inadvertence and mistake and without any fraudulent or deceptive intention on the part of deponent; that the following is a true specification of the errors which it is claimed constitute such inadvertence and mistake relied upon.

Deponent has invented various improvements in the general class of apparatus covered in the aforesaid patent, and either as such inventor or as joint inventor with his brother, Henry J. Podlesak, has procured several United States patents. Deponent, while familiar with the design, construction and operation of such mechanism, has never become familiar in detail with the procedure employed in soliciting patents. Deponent's brother, Henry J. Podlesak, has for many years taken charge of the detail work of preparing and prosecuting applications for patents covering the deponent's inventions and has, in deponent's opinion, become familiar with and skilled in the preparation and prosecution of applications for United States Letters Patent.

Shortly prior to April 15, 1912, upon which date the application for the original patent aforesaid was filed, it came to deponent's attention that the invention described in the aforesaid application was being employed by a large manufacturing concern in violation of the deponent's intention to secure to himself the exclusive right to make, use and sell the said invention.

Deponent therefore communicated with his brother, Henry J. Podlesak, advising him of the details of the construction and mode of operation of the invention sought to be covered. Deponent was thereupon advised by the said Henry J. Podlesak that the latter was very much behind in his regular work because of a severe and long continued attack of rheumatism, and that it would be practically impossible for the said Henry J. Podlesak to undertake the prosecution of the said application himself. Deponent was, however, advised by the said Henry J. Podlesak that the latter would turn the application over to someone else to be prepared and prosecuted.

Deponent thereupon assumed that the said Henry J. Podlesak would follow the prosecution of the application with the same degree of care and thoroughness as had been exercised by him in the prosecution of other earlier applications. Within the past thirty days a careful study of the said issue patent No. 1,055,076 has developed the fact that it is inoperative, due to defects and insufficiencies in the specification as above pointed out. Immediately thereafter deponent instituted an inquiry and learned from the said Henry J. Podlesak that he had turned over to Chattin Bradley the preparation and prosecution of the application aforesaid, giving him such detailed instruction as in his opinion would suffice to secure adequate protection upon the invention. Deponent learned also

from the said Henry J. Podlesak that the latter was unable, on account of illness and the pressure of other business with which his illness interfered, to give the matter of the preparation and prosecution of the application for the original patent such thorough care and consideration as had been his custom, leaving it largely to the said Chittin Bradway to prepare and prosecute the application.

The defect and insufficiency of the specification occurring in lines 19 and 20 of page 3, to the best of deponent's ability to learn the facts, resulted as follows: The specification was dictated to read, in proper position," and was transcribed by the stenographer to read "improperly positioned," the two phrases having a great similarity of sound but entirely different meanings. The error was not discovered by deponent in executing the original application papers or until within the past thirty days.

The defects and insufficiencies of claims 14, 15 and 16 of the original patent arose from the fact that the preparation and prosecution of the application was handled through several intermediaries communicating one with another. It was due to the lack of direct communication and due to a divided and uncertain responsibility between the several parties concerned that as finally issued claim 14 did not include positively as an element means on one of the arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor, and that as finally issued claim 15 repeated the element involving the spring connected with the arm and tending to hold the electrode into engagement with the arm of the rotor.

Deponent originally communicated to his brother and his brother endeavored to communicate to the said Chittin Bradway the several features of invention and improvement disclosed in the application for the said original patent, and it was the desire and attention of deponent that all the said features of invention and improvement and all of the said elements and combination constituting the said features of invention and improvement should be covered by adequate claims. Within the past thirty days a careful review of the said claims, with the assistance and advice of the said Henry J. Podlesak, has revealed the fact that certain combinations of elements, particularly those set forth in the aforesaid claims 19 to 24, inclusive, were not included among the claims of the patent as originally issued.

The aforesaid errors arose partly no doubt because of the fact that deponent was extremely anxious when he filed his application for the original Letters Patent aforesaid to secure the issue of the patent at the earliest possible date in order to enjoin the aforesaid manufacturer from employing his invention. It was no doubt due in part to the deponent's anxiety to have the prosecution of the application completed at the earliest possible moment that it was hurried through without awaiting an opportunity for such careful consideration and analysis, particularly on the part of the said Henry J. Podlesak, as the deponent ordinarily would have availed himself of.

Emil Podlesak.

Subscribed and sworn to before me this 14th day of October, A. D. 1914.

Christian Johnson, (Seal.) My Comm. expires Sept. 3/16.

(Revenue Stamp.)

OATH AS TO THE LOSS OF LETTERS PATENT

STATE OF WISCONSIN,

County of Racine, ss:

Emil Podlesak, being duly sworn, deposes and says that the Letters Patent No. 1,055,076, granted to him, and bearing date on the 4th day of March 1913, have been either lost or destroyed; that he has made diligent search for the said Letters Patent in all places where the same would probably be found, if existing, and that he has been unable to find them.

Emil Podlesak

Subscribed and sworn to before me this 30th day of October A. D. 1914.

Christian Johnson, Notary Public. (Seal.)
My Commission expires Sept. 8-1916.

(Revenue Stamp.)

Chief Clerk,

Sep. 7, 1915,

U. S. Patent Office.

Mr. Podlesak brought the Letters Patent to the Office with the statement that they had recently been discovered in a file of papers relating to a different matter.

W. F. Woolard, Chief Clerk

No. [Vignette] 1,055,076

[Stamped across face of copy:] Surrendered.

THE UNITED STATES OF AMERICA:

To all to whom these presents shall come:

Whereas Emil Podlesak, of Tiffin, Ohio, has presented to the Commissioner of Patents a petition praying for the grant of Letters Patent for an alleged new and useful improvement in Current-Generators and Igniters for Internal-Combustion Engines, a description of which invention is contained in the specification of which a copy is hereunto annexed and made a part hereof, and has complied with the various requirements of Law in such cases made and provided and

Whereas upon due examination made the said Claimant is adjudged to be justly entitled to a patent under the Law.

[Stamped across face of copy:] Surrendered.

Now therefore these Letters Patent are to grant unto the said Emil Podlesak, his heirs or assigns for the term of Seventeen years from the fourth day of March, one thousand nine hundred and thirteen, the exclusive right to make, use and vend the said invention throughout the United States and the Territories thereof.

[Stamped across face of copy:] Surrendered.

In testimony whereof I have hereunto set my hand and caused the seal of the Patent Office to be affixed at the City of Washington this fourth day of March, in the year of our Lord one thousand nine hundred and thirteen, and of the Independence of the United States of America the one hundred and thirty-seventh.

C. C. Billings, Acting Commissioner of Patents.

Printed copy, same as copy with File and Contents #1,055,076.

L. A. Williams. 267,785. 1914

Department of the Interior,
United States Patent Office,
Washington, D. C., December 21, 1914.

Application of Emil Podlesak, Tiffin, Ohio, for Reissue of Letters Patent, No. 1,055,076, dated March 4, 1913 for improvement in "Current-Generator and *and* Igniter for Internal-Combustion Engines."

I certify that careful search has been made in the Digest of Assignments in this Division and that no assignment of undivided interest is found of record under or relating to the aforesaid Letters Patent up to and including December 12, 1914.

Willis B. Magruder, Chief of Assignment
Division. W. G. W.

Paper No. 1

Oct. 26, 1915.

Lynn A. Williams, Monadnock Block, Chicago, Ill.:

Patent to Emil Podlesak No. 13,878, Reissued Feb. 9, 1915, S. No. 878,726, filed Dec. 23, 1914, Current-Generator and Igniter for Internal-Combustion Engines (Original No. 1,055,076, dated Mar. 4, 1913, S. No. 690,921.

39,181

Count 1. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

Count 2. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

Count 3. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

Count 4. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

Count 5. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shaft extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

Count 6. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

Count 7. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said mova-

E. PODLESAK.

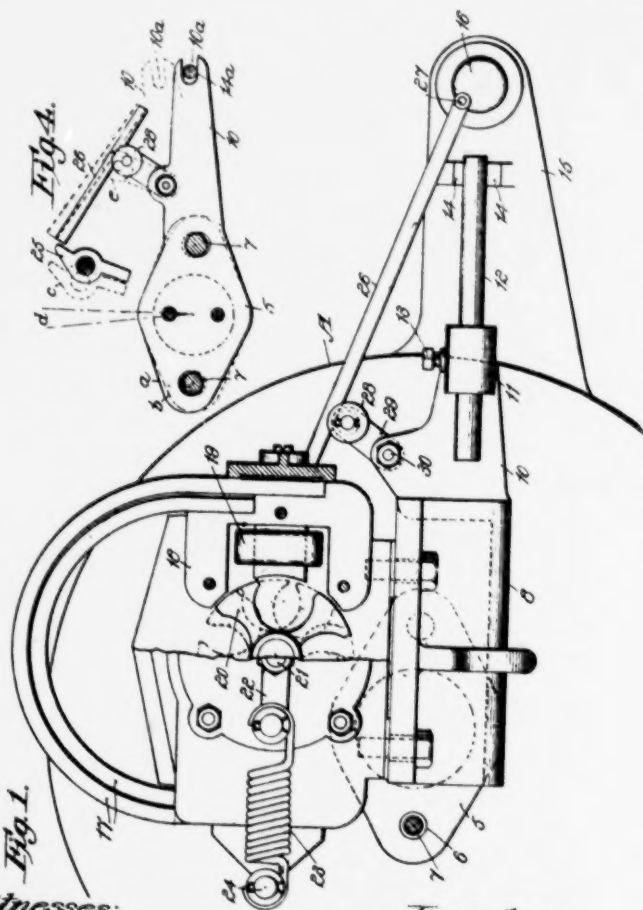
CURRENT GENERATOR AND IGNITER FOR INTERNAL COMBUSTION ENGINES.

APPLICATION FILED DEC. 23, 1914.

Reissued Feb. 9, 1915.

13,878.

2 SHEETS-SHEET 1



Witnesses:
 Ulbin C. Ahlberg
 Robert F. Brad

Inventor
Emil Podlesak
By James L. Williams
Attorney

E. PODLESAK.

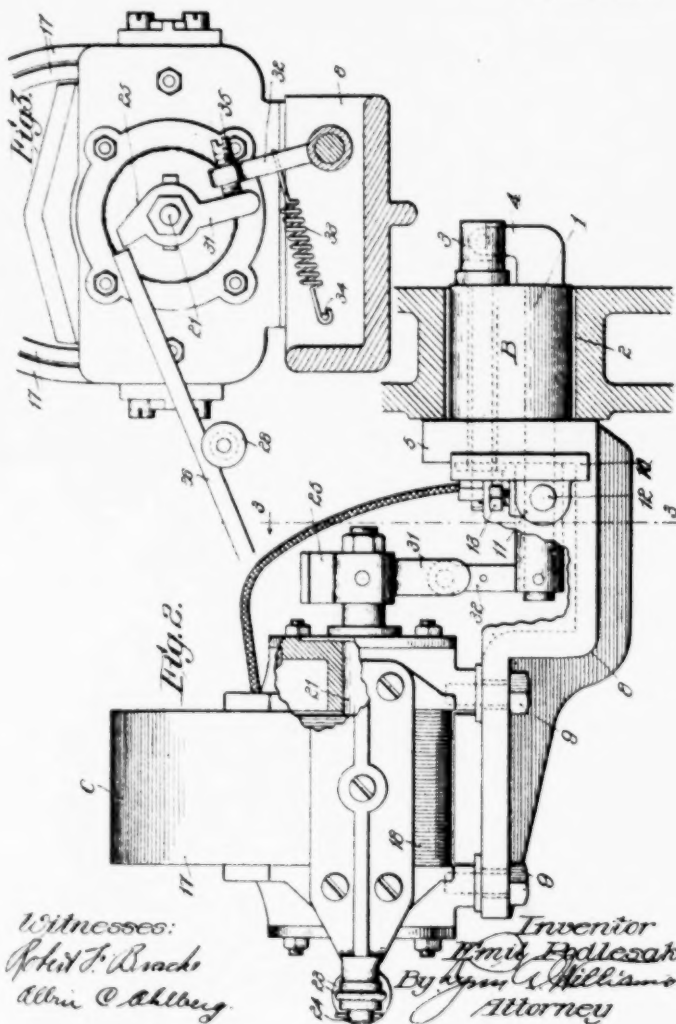
CURRENT GENERATOR AND IGNITER FOR INTERNAL COMBUSTION ENGINES.

APPLICATION FILED DEC. 22, 1914.

Reissued Feb. 9, 1915.

13,878.

2 SHEETS-SHEET 2



Witnesses:
 Phil F. Bracke
 Alvin C. Ahlberg

Inventor
 E. Podlesak
 By J. W. Williams
 Attorney

UNITED STATES PATENT OFFICE.

EMIL PODLESAN, OF TIFFIN, OHIO

CURRENT-GENERATOR AND IGNITER FOR INTERNAL-COMBUSTION ENGINES.

13,878.

Specification of Reissued Letters Patent. Reissued Feb. 9, 1915.

Original No. 1,055,076, dated March 4, 1913. Serial No. 690,921. Application for reissue filed December 23, 1914. Serial No. 878,726.

To all whom it may concern:

Be it known that I, EMIL PODLESAN, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Current-Generators and Igniters for Internal-Combustion Engines, of which the following is a specification.

This invention relates to igniters of the make and break type and in which the magneto or current generator is combined therewith as a unitary structure that is fastened to the head or other suitable part of the engine cylinder, the rotor of the generator being operatively connected with the movable electrode of the igniter so that a reciprocatory actuator, push rod or equivalent means operating on the rotor trip finger against the tension of spring means causes the rotor to move to "cocked" position while the electrodes of the igniter are brought together, and then released from such "cocked" position so that the electromotive force generated by the sudden return movement of the rotor through the magnetic field of the generator will produce the igniting current whereby the spark is produced between the electrodes in the compression chamber of the engine. The combination of means and instrumentalities above referred to is the subject-matter of my pending application for Letters Patent of the United States, Serial No. 668,153, filed December 27, 1911, and the present invention relates to improvements especially adapted for combined igniters and generators of the type referred to.

The actuating means for the rotor and movable electrode is mounted on the engine cylinder or other suitable part and is operatively connected with some moving mechanism and has no connection with the magneto or igniter, since the actuator, which may be a push rod, rotating or oscillatory arm or the like, merely contacts with the trip finger of the rotor. As the igniter and generator must be removed from time to time for cleaning the electrodes and other reasons, it is of great importance that the igniter and generator be replaced in exactly the same position it was before removal; otherwise the push rod will not be disposed in proper relation to the trip finger of the rotor to accomplish satisfactory results in the operation of the engine, generator and

igniter. The reason for this liability of the igniter being replaced in a different position from that which it originally occupied when all the operating parts, were adjusted to accomplish the best results, is due to the fact that the holes in the body of the igniter for receiving the bolts or fastening studs are made larger than the bolts or studs, as is also the opening in the engine cylinder for receiving the body of the igniter, this "latitude" between the parts being provided so as to facilitate easy removal of the igniter and to obviate the necessity of careful and expensive machining and fitting of the parts. By reason of the liability to error in replacing the igniter, there is provided an arm or equivalent means on the igniter body to inter-engage with a fixed part on the engine cylinder, so that there can be but one position in which the igniter can be attached to the cylinder, and that position is the one where the push rod or other actuator is in proper relation to the trip finger of the rotor. As the result of this arrangement, it is never necessary to adjust the relation of the various instrumentalities in replacing the igniter when it has been removed for cleaning or any other purpose.

In addition to the foregoing objects and advantages, the invention has certain other minor advantages which will appear hereinafter as the description proceeds in reference to the accompanying drawings, in which—

Figure 1 is a front view of the combined igniter and current generator applied to the head of an engine cylinder, part of the generator being shown in section. Fig. 2 is a front view thereof showing a portion of the cylinder head in section. Fig. 3 is a sectional view on line 3—3, Fig. 2. Fig. 4 is a diagrammatic view to show the results of a defective positioning of the igniter with respect to the operating push rod.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawings, A designates the head or other wall of a cylinder of an internal combustion engine; B, the make and break igniter; and C, the magneto current generator of the inductor type.

The igniter B comprises a cylindrical body 1 which passes through an opening 2

in the cylinder head A, the opening being of slightly larger diameter than the diameter of the igniter body, so that the latter can be easily inserted or removed. Passing through the igniter body is a fixed electrode 3 with which coöperates a movable or rocking electrode 4. The outer end of the igniter body is formed with a rhomboidal plate 5, which, as shown in Fig. 1, has bolt-receiving openings 6 that are slightly larger in diameter than the fastening bolts or studs 7 that pass through the openings and are fastened to the cylinder head A. Thus, there is considerable latitude allowed between the body 15 of the igniter on the one hand and the cylinder head and fastening bolts on the other, and by reason of this, the igniter body is liable to be fastened to the cylinder head in a variety of positions within the limit of this latitude, the disadvantages of which have been hereinbefore pointed out, but are overcome by the improvements later to be set forth.

Extending from the plate portion 5 of the igniter body is a shelf or bracket 8 which forms a base to which the generator C is removably secured by stud bolts 9. Projecting laterally from the bracket or shelf 8 is an arm 10 which is formed at its outer extremity with a boss or enlargement 11 that has a passage through which extends an extension rod 12, the rod being fastened in any desired position by a set screw 13 or equivalent means. The outer extremity of this extension rod is located at a considerable distance from the axis of the igniter and this extremity is adapted to engage some fixed part of the engine, such for instance as lugs 14 on the arm 15 in which the operating shaft 16 rotates. The lugs 14 are spaced apart far enough for the extension rod to enter between them as the igniter body is inserted in the opening in the engine cylinder, and when thus positioned, it is impossible for the igniter body to shift angularly or around its axis and thereby disturb the proper relation of the igniter and generator operating means. The parts 10, 12 and 14 thus constitute means for insuring the proper positioning of the igniter and the design of the parts is such that no special care or adjustment is required in taking off or replacing the igniter.

The generator C is fully set forth in the pending application hereinbefore referred to, so that only a brief description here is deemed necessary. The generator comprises permanent horseshoe magnets 17 fastened to E-shaped pole pieces 18, on the middle projections of which are generating coils 19. In the present drawings, only one pole piece and coil is shown in Fig. 1, the other corresponding parts being concealed from view. Between the pole pieces oscillates a cruciform rotor 20 mounted on a shaft 21 which

has at one end oppositely disposed crank arms 22 which are connected with springs 23 that assume an alining position through the axis of the rotor when the latter is idle, the outer ends of the springs being fastened to studs 24 on the generator frame. On the opposite end of the rotor shaft is a trip finger 25 which is adapted to have a wiping engagement with a push rod 26 or other equivalent actuator, which rod has its end opposite from the trip finger connected with the crank pin 27 of the rotating shaft 16. The push rod or actuator has a combined reciprocatory and rocking movement on a bearing pulley 28 journaled on a support 29 which is fastened by a bolt or equivalent means 30 to the arm 10 of the igniter frame, said bolt forming a pivot on which the member 29 can be adjusted to different positions for bringing the free end of the push rod 26 into proper coöperative relation with the trip finger 25. The trip finger has a tail piece or arm 31 which is adapted to be engaged by an arm 32 fastened to the outer end of the movable electrode 4, the arm 32 being held yieldingly against the arm 31 by a helical extension spring 33 which has one end connected with the arm 32 and the other end anchored at 34 on the igniter frame. To obtain the proper set of the sparking points of the electrodes with respect to the rotor of the generator, one arm, such as 33, has an adjustable screw 35 which engages the arm 31. The spring 33 is of less tension than the return springs 23 of the rotor and is sufficient to maintain the arms 31 and 32 in contact during the first part of the cocking movement of the armature and to maintain the electrodes in contact during the final part of such cocking movement, it being understood that the electrodes are normally separated, and that they come into contact before the rotor or armature finishes its cocking movement, or the position of the rotor shown by dotted lines in Fig. 1. At the end of the cocking movement, the push rod 26 slips off the tip of the trip finger, and the springs 23, which have been extended or placed under tension during the cocking movement, quickly snap the rotor back to and beyond its normal position, as indicated by the dot and dash lines, Fig. 1. This quick movement of the rotor quickly changes the path of the magnetic flux through the pole pieces and rotor, with the result that a high electro-motive force is induced in the generating coils, the maximum electro-motive force occurring at about the time the electrodes are separated during the return movement of the arm 31 of the trip finger, such arm being adapted to strike the arm 32 a hammer blow for effecting a quick separation of electrodes.

By referring to Fig. 4 the effect of a defective positioning of the igniter is clearly

depicted. Without the use of the positioning controlling parts 10, 12 and 14, it is possible for the igniter to be secured in either the full line position *a* or dotted line position *b*, because of the latitude provided between the igniter body and the bolts and cylinder wall. In other words, the igniter can be fastened to one side or the other of its true central position to an extent corresponding to the angle *d*. Thus, the trip arm of the rotor 25 would be in the dotted line position *c* when the igniter is in the dotted line position *b*, and as a consequence the push rod 26 would not be long enough to operate the trip finger 25, and furthermore the push rod supporting roller 28 would be raised to the dotted line position *e*, thereby raising the active end of the trip rod above the tip of the trip finger. When the igniter body is in the full line position *a*, the trip finger is shifted to the right and the supporting roller 28 is lowered so that the push rod and trip finger will obviously be in proper position. These contingencies can be guarded against by providing the arm 10 on the igniter body and having some means on the fixed part of the engine to engage such arm, such means being the lugs 14, as in Fig. 1, or a bolt or pin 14^a engaging in the slot 10^a of the arm 10, as in Fig. 4.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, is:—

1. The combination of an engine cylinder, a make and break igniter, fastening means for securing the igniter in position on the cylinder, an electric generator having its movable element operatively connected with the movable element of the igniter, an actuator for the movable elements of the igniter and generator, said igniter being removable from the cylinder while the actuator remains in place, and means in addition to the said fastening means for insuring the correct positioning of the igniter with respect to the actuator when the former is replaced on the engine after removal and for preventing shifting of the igniter, said latter means comprising engaged parts on the engine cylinder and igniter.

2. The combination of an engine cylinder,

an igniter, means for removably fastening the igniter on the cylinder, there being sufficient play between the parts to insure removal of the igniter while rendering the igniter liable to replacement for different positions, an actuator for the igniter requiring a predetermined position of the igniter with respect thereto, and means partly on the igniter and partly on the engine for insuring such predetermined relative position of the actuator and igniter.

3. The combination of an engine cylinder, an igniter and electric generator forming a unitary structure removably mounted on the cylinder, fastening means for the said unitary structure, said structure being liable to replacement in different positions on the cylinder, an actuator for the movable elements of the generator and igniter and operatively connected with the moving part of the engine, and means in addition to the said fastening means for insuring a predetermined relative position of the actuator and movable elements of the igniter and generator, said latter means consisting of relatively fixed parts of the said structure and engine cylinder which inter-engage when the said structure is in proper position.

4. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising a laterally-extending arm on the igniter, and a fixed part on the engine with which the arm is adapted to engage.

5. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising an arm on the igniter, a longitudinally adjustable member on the arm, and a part fixed on the engine with which the said member is adapted to releasably engage.

6. The combination of an engine cylinder, a make and break igniter mounted thereon, and liable to assume different positions within certain limits, an actuator for the movable element of the igniter, means for moving the actuator, a laterally-extending arm on the igniter, and means fixed on the engine with which the arm is removably connected to insure such position of the igniter that the actuator and movable electrode will be in proper relation to each other, and means on the arm for supporting the actuator.

7. The combination of an engine cylinder, a make and break igniter removably mounted thereon and liable to assume different positions within certain limits, a generator carried by the igniter and removable therewith as a unitary structure, the movable elements of the igniter and generator being operatively connected, an actuator for the said movable elements, a moving part of the engine with which the actuator remains connected while the igniter and generator are removed, and engaging means between the said structure and engine cylinder for permitting the placing of the latter in only one position.
8. The combination of an engine cylinder having an opening, a make and break igniter secured in the opening and liable to assume different positions within certain limits, a generator mounted on the igniter and removable therewith, means for operatively connecting the movable elements of the igniter and generator, a push rod, a trip finger connected with one of the movable elements and with which the actuator is adapted to engage, and means arranged partly on the engine and partly on the igniter and generator structure whereby the push rod and trip finger will be in proper relation to each other each time the igniter and generator structure is replaced after removal from the cylinder.
9. The combination of an engine cylinder, an igniter mounted thereon, a generator mounted on the igniter, means for operatively connecting the movable elements of the generator and igniter to move together, a trip finger connected with the said movable elements, an operating shaft, a push rod adapted to engage the trip finger, means for reciprocating the rod by the shaft, and means whereby the igniter and generator structure can be fastened in only one position where the push rod and trip finger are in proper relation to each other, said means comprising a part on the igniter and generator structure and a part on the engine with which the first part is detachably engaged.
10. The combination of an engine, an igniter mounted on the cylinder thereof, a bracket extending from the igniter, a generator on the bracket, means for operatively connecting the movable elements of the generator and igniter together, a trip finger connected with the movable elements, a push rod adapted to wipe on the trip finger, means for actuating the push rod, an arm extending from the bracket, a support on the arm for the trip rod, and means fixed on the engine with which the arm engages whereby the igniter can be replaced on the engine cylinder in only that position in which the trip finger and push rod are in proper relation.
11. The combination of an engine cylinder, an arm extending laterally from the head thereof, a shaft bearing in the arm, a push rod, and a crank pin connection between the shaft and push rod, with an igniter mounted on the engine cylinder and having its movable electrode operatively related to the push rod, an arm extending from the igniter, and means on the arm of the engine cylinder with which the first-mentioned arm detachably engages for permitting the igniter to be attached in only that position where the push rod and movable electrode are in proper relation, and means on the first-mentioned arm for movably supporting the push rod.
12. The combination of an engine cylinder, an igniter and current generator structure removably mounted thereon, the movable elements of the igniter and generator being operatively connected, a trip finger connected with such movable elements, an arm extending from the igniter, means fixed with respect to the engine cylinder for engagement with the arm whereby the said structure can be fastened in only one position on the cylinder, an actuating push rod arranged to engage the trip finger, means for reciprocating the push rod, and an adjustable support mounted on the arm and on which the push rod moves.
13. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.
14. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.
15. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.
16. The combination of an igniter frame,

comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion motor, sparking electrodes mounted in said body, a magneto generator mounted on said base, means for actuating the said generator to generate current, means for actuating one of the electrodes, and means relatively fixed on said motor for engaging said laterally extending arm.

17. The combination of an igniter frame, comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion engine, sparking electrodes mounted in said body and adapted to make and break a circuit within the combustion chamber of the engine, a magneto generator mounted on said base, means for actuating the magneto generator to generate current, means for operating one of the electrodes cooperatively with said generator, a member extensibly mounted in said laterally extending arm, and means secured in relatively fixed relation on the engine to engage said extensible member.

18. In combination, a magneto generator comprising a field magnet, a pair of pole pieces, inductive windings, and a rotor mounted on a shaft, means for cocking said rotor, spring means for suddenly bringing said rotor back upon the release, an igniter frame comprising a body and a shelf extending therefrom and supporting said generator, a stationary insulated electrode and a movable electrode mounted in said body, said movable electrode adapted to make contact with the other said electrode, an arm on said rotor shaft and adapted to cooperate with said arm on movable electrode to so oscillate the movable electrode as to make and break contact with said other electrode, a circuit connecting said windings to said electrodes, and an arm extending from said igniter frame and adapted to engage on a relatively fixed member on the engine associated with said frame.

19. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

20. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating

on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

21. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

22. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

23. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

24. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor

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for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said

arms for adjusting the relation of the arm and thereby the relation of the position of the movable electrode to the rotor.

In witness whereof, I hereunto subscribe my name this 30th day of October, A. D. 1914.

EMIL PODLESAK.

Witnesses:

B. R. BECKWITH,
H. F. GEIST.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

He electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

Count 8. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

Count 9. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

The interference involves your patent above identified and

An application for Electric Igniters, filed by Edmund Joseph Kane, of 123 South Waller St., Chicago, Ill., whose attorneys are Brown, Nissen & Sprinkle, of 312 So. Dearborn St., Chicago, Ill.

The relation of the counts of the interference to the claims of the respective parties is as follows:

| Counts. | Kane. | Podlesak. |
|---------|-------|-----------|
| 1 | 7 | 13 |
| 2 | 8 | 14 |
| 3 | 9 | 15 |
| 4 | 10 | 19 |
| 5 | 11 | 20 |
| 6 | 12 | 21 |
| 7 | 13 | 22 |
| 8 | 14 | 23 |
| 9 | 15 | 24 |

Copy to Emil Podlesak, Racine, Wis.

Copy to Lynn A. Williams, Monadnock Black, Chicago, Ill.

A. R. Benson, Examiner. A. R. B.

(Here follows patent specification marked side folio pages 964, 965, 966, 967, 968, 969, 970, and 971.)

Mail Room,
Jan. 14, 1915,
U. S. Patent Office.

2097

PETITION

To the Commissioner of Patents:

The petition of Edmund Joseph Kane, a citizen of the United States, residing at Chicago, in the County of Cook, State of Illinois, and whose Post Office address is 123 South Waller Street, Chicago, Ill., prays that Letters Patent may be granted to him for the improvement in Electric Igniters, as set forth in the annexed specification.

And he hereby appoints Brown; Nissen & Sprinkle (a firm composed of Frank T. Brown, Charles M. Nissen & Arthur L. Sprinkle, Registration No. 3604), 1124 Monadnock Block, 312 So. Dearborn Street, Chicago, State of Illinois his attorneys, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign the drawings, to receive the Patent, and to transact all business in the Patent Office connected therewith.

Signed at Chicago, in the County of Cook, and State of Illinois,
this 11th day of January, 1915.

Edmund Joseph Kane.

(Revenue Stamp.)

SPECIFICATION

To all whom it may concern:

Be it known that I, Edmund Joseph Kane, a citizen of the United States residing at Chicago in the County of Cook and State of Illinois, have invented certain new and useful improvements in Electric Igniters, of which the following is a specification:

My invention relates to magnetic generators for ignition systems of explosive engines, and this application is a division of my prior application for Electric Igniters for Explosive Engines filed February 2, 1910, Serial Number 541,428.

The object of my invention is to provide a simple and efficient device of the character mentioned. A further object is to reduce wear and hammering of the electrical make-and-break contacts, and other parts of the generator.

My improvement consists in substantially the combination and arrangement of parts hereinafter described, shown in the accompanying drawing forming a part of this specification, and more particularly specified in the subjoined claims.

In the drawing:

Fig. 1 is a top view of a magneto generator, shown as attached to fragments of an explosive engine, and embodying my invention.

Fig. 2 is a section taken on line 2—2 of Fig. 1, but showing a larger portion of the cylinder of the engine than in Fig. 1, and showing parts of the magneto cut away in broken lines; and,

Fig. 3 is a fragmentary view of a portion of the device taken as on lines 3—3, in Fig. 1.

My invention is particularly adaptable to the type of magneto generators employing an oscillatory armature or inductor, and in connection with the make-and-break type of ignition systems.

In the drawing, an explosive engine 1, fragments of which are shown, is provided with a suitable opening for the ignition points of a make-and-break system, and around this opening, on the outer side of the cylinder wall, is an ignition block 8, provided with an extension 9 extending through said opening into the cylinder. At the inner end of the extension 9 is carried the fixed contact 10 of the make-and-break system. The electrode 10 is mounted in block 8 and insulated therefrom in the usual manner, such insulation not being shown. At the outer end of the contact member 10 is secured a conductor wire 11, between nuts 12 and 13.

On block 8 is an arm 14 having a bearing member 15 at its outer end. In the bearing member is journaled a shaft 16, which carries the armature or inductor 17. The inductor 17 rotates between the field-cores 18 and 19. The cores 18 and 19 are provided with suitable electrical windings and formed on the pole pieces 20 and 21, and the latter are joined by fixed magnets 22 and 23.

Insert B'. The pole pieces 20 and 21 are carried on \wedge [an extension 25 formed on the bearing member 14].*

is

Per B. One end of the conductor 11 is connected to or [a]* part of the winding on pole-core 19, and the latter is connected to the winding on pole-core 18 in the usual manner, and is not specifically shown. The other end 24 of

supporting block

Per B. the winding on pole-core 18 is secured to the [extension] at the or other suitable fastening means

" " [by a]* set screw 25^a \wedge to ground the circuit in the framework of the magneto. A movable contact 26 is adapted to co-operate with fixed contact 10, and is provided with a portion extending through block 8, and in electrical contact therewith. On the outer end of the portion 26 which extends & beyond

" " through \wedge block 8 is fixed an arm 27, and on the extended portion of part 26 is mounted a torsion spring 28 with one end engaging block 8, and the engaging

" " other end \wedge [resting on]* arm 27 in a manner to cause contacts 26 and 10 to normally remain in contact. In the free end of arm 27 is threaded an

[*Words and figures enclosed in brackets erased in copy.]

anvil 29. The anvil 29 is adjustably mounted in the free end of arm 27, so that timing of the engine may be varied slightly by such adjustments.

Per B.

Secured on the shaft 16 is a yoke member 30, having two arms extending in opposite direction from shaft 16, with one of the arms 30 positioned one end of anvil 29, and adapted, upon oscillation of shaft 16, to cause movement of the anvil to open the contacts 26-10, as will be described later. The arms of member 30 are provided with lateral extensions which are connected to tension springs 31 and 32, said springs being secured at their other ends to brackets 33 and 34 on pole pieces 20 and 21, so that the tension of springs 31 and 32 normally maintains the arm member 30 in a position in striking relation

Insert B¹.

so that one of its arms Δ [closed]* to the anvil 29 Δ . On the member 30 is an actuating arm 35 adapted to be engaged by a plunger 36. The plunger 36 is actuated from [by]* the crank shaft of the engine, not shown. The end of plunger rod 36 which engages arm 35 is mounted on a flanged roller 38, and the latter journaled on an arm 37 formed on bearing member 15. The plunger 36 is provided with a wedged member or inclined cam surface on member 62, so that upon longitudinal movement of the plunger, the latter will engage arm 35 to oscillate member 30 and arm 35, and after riding on the cam surface will be raised from the arm 35, permitting springs 31 and 32 to restore member 30 to its normal position. Owing to the elasticity of springs 31 and 32 and the momentum of member 30, the latter will be carried slightly past its normal position, and engage anvil 29 and rock contact member 26 away from contact 10 to open the electric circuit. This opening of the circuit pro-

Insert B².

Per B. duces the spark for igniting the engine. Δ The portion of member 30 which engages the bottom of anvil 29 is preferably rounded or curved, in order to effect uniform movement of the arm 27 during the time the member 30 is in contact with anvil 29. The field pieces and inductor are not shown in detail, since their specific parts are not part of this invention. Any suitable field pieces or inductor may be used, as desired.

While I have illustrated and described the preferred form of my invention, I do not desire to be limited to the precise details and arrangement set forth, but desire to avail myself of such variations and changes as may come within the scope of the appended claims.

I Claim: In combination a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an

[*Words and figures enclosed in brackets erased in copy.]

internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact, and the push finger into their normal positions.

2. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with the yoke, and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

4. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuat-

ing rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

5. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and an impact member fixed relative to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

6. In a device of the class described, a field magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the field magnet, a yoke mounted upon said shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an ignition spark in the combustion chamber of the engine.

Insert A'.>

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 11th day of January, A. D. 1915.

Edmund Joseph Kane. Witnesses: Arthur
L. Sprinkle. Thomas Colson.

OATH

COUNTY OF COOK,

State of Illinois, ss.:

Edmund Joseph Kane, the above named petitioner being duly sworn (affirmed), deposes and says that he is a citizen of the United States and resident of Chicago, in the County of Cook, and State of Illinois; that he verily believes himself to be the original, first, and sole inventor of the improvement in Electric Igniters, described and claimed in the foregoing specification; that he does not know and does not believe that the same was ever known or used before his invention or discovery thereof, or patented or described in any printed publication in any country before his invention or discovery thereof, or more than two years prior to this application, or

in public use or on sale in the United States for more than two years prior to this application; that said invention has not been patented in any country foreign to the United States on an application filed by him or his legal representatives or assigns more than twelve months prior to this application; and that no application for patent on said improvement has been filed by him or his representatives or assigns in any country foreign to the United States.

Edmund Joseph Kane.

Sworn to and subscribed before me this 11th day of January, A. D. 1915.

Charles H. Seem, Notary Public. [Seal.]

Paper No. 2

March 24, 1915.

Brown, Nissen & Sprinkle, 312 So. Dearborn St., Chicago, Ill.:

Edmund Joseph Kane. S. No. 2097. Filed Jan. 14, 1915.
Electric Igniters.

This case has been examined.
Claim 6 is rejected upon

Weber, 820,535, May 15, 1906 (123-149 s).

The remaining claims are allowable, as at present advised.
Applicant's attention, however, is directed to

Podlesak, 1,098,052, May 26, 1914 (123-149 s), and

Podlesak, 1,055,976, Mar. 4, 1913 (123-149 s).

As these may have bearing upon applicant's case.

Benson, Examiner. H. H. G.

Mail Room,
Apr. 17, 1915,
U. S. Patent Office.

U. S. Patent Office,
Apr. 19, 1915,
Division XXVIII.

3

A

In the United States Patent Office

Division 28, Room 63

Edmund Joseph Kane. Electric Igniter. Filed January 14, 1915.
Serial No. 2097.

The Commissioner of Patents, Washington, D. C.

SIR: In the above entitled application, and in response to the office letter of March 24, 1915, please amend as follows:—

Add the following claims:—

A¹. 7. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

8. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

9. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

10. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

11. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

12. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

13. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted thereon, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

14. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

15. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

Remarks

The six claims in this application as filed are the claims allowed in the Milton patent No. 1,096,048, granted May 12, 1914, and ap-

plicant desires that an Interference with Milton be declared by the office as soon as practicable.

Applicant notes that the Examiner has rejected claim 6 upon the Weber patent No. 820,535. It must be admitted that at first glance the language of this claim may be thought readable upon the Weber construction, but the claim is considered to be allowable to applicant for the same reasons that it was allowed to Milton, as Milton's structure is identical with that of applicant's, and as the present application is filed as a division of applicant's Serial No. 541,428, filed February 2, 1910, applicant appears to have priority over Milton with respect to filing dates, and desires to contest the claims of the Milton patent in Interference.

Regarding claim 6, which the Examiner has thought met by Weber, attention is called to the fact that this claim specifies "a yoke mounted upon said shaft for oscillation with said inductor." It can hardly be said that Weber has a yoke. A yoke in its ordinary significance means a member that joins two parts or things together, and the part 30 of the Kane application to each of the end branches of which the springs 31, 32 are attached, is properly described as a yoke. This is also true of the member 15 having the lateral branches 16 comprising the yoke of the Milton patent No. 1,096,048 (See Figs. 1 and 4).

Referring now to the Weber construction, we fail to find a yoke in this sense. The only part that compares with applicant's yoke and the Milton yoke, is the radially extending arm 40, which is simply a lever secured to the shaft 15. The lever 40 does not have extension beyond the shaft 15, unless perchance the Examiner has noticed the impact member 41. Attention is called to the fact that the arm 41, however, is not a part of any yoke, because there is no spring secured to the arm 41, nor is there any connection leading therefrom to another spring, as in the Milton device, and in applicant's device.

Furthermore, what is of still greater importance is that claim 6, as drawn, specifies also "springs tending to retain the inductor and shaft in normal position." Weber does not show this structure, but it is one of the characteristic features of applicant's construction, and also that of Milton, because there are springs connected to each of the two branches of the yoke, constantly under tension, or under tension at all times, and tending to retain the yoke and the inductor and the shaft carrying the same, in normal position.

If we look at the Weber construction, we see that he does not have springs tending to hold the arm 40 and the inductor and its shaft in normal position, but he has a single spring 50 coiled around the reciprocating rod 39. This spring 50 must serve the double function of a compression and tension spring, being alternately under tension and compression. This is one of the disadvantages of the Weber construction, as no spring will be entirely satisfactory which must be subjected to alternate compression and tension strains. It is well known that a spring under such conditions is more apt to crystallize and break when subjected to alternate tension and com-

pression strains than when subjected to only one character of strain or work.

For these reasons, it is thought that claim 6 distinguishes the Milton and applicant's constructions over that of Weber, and allowance of the claim to applicant is requested.

Applicant has noted the Examiner's reference to the Podlesak patents, No. 1,098,052 and 1,055,076. Applicant also notes that the patent No. 1,055,076 was re-issued as Re-issue No. 13,878, of February 9, 1915. A careful consideration of the claims of the re-issue patent would indicate that claims 13 to 15, inclusive, and claims 19 to 24, inclusive, read equally as well upon applicant's structure as upon the structure shown in the Podlesak patent. As applicant's original application, of which the present application is a division, was filed long prior to the filing date of the original, applicant has incorporated these claims in the present amendment, and asks that they be entered, and that an Interference with Podlesak, as well as with Milton, be declared as soon as practicable.

Respectfully submitted,

Brown, Nissen & Sprinkle, Attorneys for Applicant.
Chicago, Illinois, April 14,
1915.

Mail Room,
May 10, 1915,
U. S. Patent Office.

U. S. Patent Office,
May 11, 1915,
Division XXVIII.

4

In the United States Patent Office

Division 28, Room 63

Edmund Joseph Kane. Electric Igniter. Filed January 14, 1915.
Serial No. 1097

The Commissioner of Patents, Washington, D. C.

SIR: Supplementing my amendment of April 14, 1915, I am enclosing a supplemental oath referring to the claims in this case.

Respectfully submitted,

Edmund Joseph Kane, By Brown, Nissen &
Sprinkle, Attorneys. Chicago, Illinois,
May 8, 1915.

Mail Room,
May 10, 1915,
U. S. Patent Office.

U. S. Patent Office,
May 11, 1915,
Division XXVIII.

In the United States Patent Office

Div. 28, Room 63

Edmund Joseph Kane. Electric Igniter. Filed January 14, 1915.
Serial No. 2097

SUPPLEMENTAL OATH

STATE OF ILLINOIS.

County of Cook, ss:

Edmund Joseph Kane, the applicant of the application for Letters Patent above identified, being duly sworn, deposes and says that the subject-matter of the fifteen claims now in this application which includes the six original claims and the nine claims numbered 7 to 15 inclusive, submitted in his amendment dated April 14, 1915, and responsive to Office action of March 24, 1915, was part of his invention, was invented before February 2, 1910, the filing date of his original application, Serial No. 541,428, of which the above identified application is a division, was not known or used before his invention, was not patented or described in a printed publication in any country more than two years before February 2, 1910, was not patented in a foreign country on an application filed more than twelve months before February 2, 1910, was not in public use or on sale in this country more than two years before the date of his said original application, and has not been abandoned.

Edmund Joseph Kane. [Seal.]

Sworn to and subscribed before me this 7th day of May, 1915.

Thomas Colson, Notary Public. [Seal.]

Paper No. 5

Aug. 6, 1915.

Brown, Nissen & Sprinkle, 312 So. Dearborn St., Chicago, Ill.:

Edmund Joseph Kane. S. No. 2097. Filed Jan. 14, 1915. Electric Igniters

Case considered as amended April 17, 1915.

An interference will be declared between applicant and patent to Milton, 1,096,048, granted May 12, 1914, on claims 1 to 6 of applicant.

Claims 7 to 15, inclusive, which were made by applicant for the purpose of obtaining an interference with Podlesak, are rejected as lacking foundation. It is noted in this respect that each of the

claims 7 to 15 includes in various terms "an arm on the rotor, an arm on said movable electrode adapted to engage with the first mentioned arm, and spring means for holding said arms in engagement."

It will be noted from applicant's statement respecting the mode of operation of his device that in his structure these arms are not normally in contact, being only in contact when the magneto rotor is carried past the normal position on the return stroke by inertia. See lines 14 and 15, page 4 of applicant's specification.

Applicant's make-and-break contacts are therefore normally in contact and open upon the return stroke of the magneto.

In Podlesak, it will be noted that the arms being in normal contact, his make-and-break contacts are normally open and are only closed momentarily when the rotor reaches the end of its motion just prior to release.

In last line, page 3 of applicant's specification, "closed" should read *close*.

Benson, Examiner. H. H. G.

Paper No. 6

Aug. 24, 1915.

Brown, Nissen & Sprinkle, 312 So. Dearborn St., Chicago, Ill.:

Application of Edmund Joseph Kane. S. No. 2097. Filed Jan. 14, 1915. Electric Igniters

39,013

Count 1. In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

Count 2. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections

at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections of the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion *chambre of an internal combustion* engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with the yoke, and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

Count 3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

Count 4. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

Count 5. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and an impact member fixed relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

Count 6. In a device of the class described, a field magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the field magnet, a yoke mounted upon said shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an ignition spark in the combustion chamber of the engine.

The interference involves your application above identified and A patent (No. 1,096,048, May 12, 1914) for Magneto-Generator granted to John Lewis Milton, whose postoffice address is c/o Webster Electric Company, Tiffin, Ohio, and whose attorney is Lynn A. Williams, Menadnock Block, Chicago, Ill.

The relation of the counts of the interference to the claims of the respective parties is as follows:

| Counts. | Kane. | Milton. |
|---------|-------|---------|
| 1 | 1 | 1 |
| 2 | 2 | 2 |
| 3 | 3 | 3 |
| 4 | 4 | 4 |
| 5 | 5 | 5 |
| 6 | 6 | 6 |

A. R. Benson, Examiner. H. H. G.

Mail Room,
Aug. 26, 1915,
U. S. Patent Office.

U. S. Patent Office,
Aug. 27, 1915,
Division XXVIII.

8.

In the United States Patent Office.

Division 28, Room 63.

Edward Joseph Kane. Electric Igniters. Filed Jan. 14, 1915.

Serial No. 2097.

The Commissioner of Patents, Washington, D. C.

SIR:

Not Entered.

This communication is in response to the official letter of August 6, 1915.

Page 3 of applicant's specification, in last line, change "closed" to close.

Remarks

Applicant notes that the Examiner will, in due course, declare an interference between applicant and the patent to Milton, Patent No. 1,096,048, granted May 12, 1914, on claims 1 to 6 of the applicant.

The Examiner's attention is called to the fact that the patentee Milton was an employee of the Webster Electric Company, which is the party in interest in the Podlesak patent also. It is believed that the records of the Patent Office, Assignment Division, will also show that the Milton patent is assigned to the Webster Electric Company, and that the same records will show that the Webster Electric Company is the party in interest in the Podlesak re-issue.

[Matter enclosed between rules erased in copy.]

The Examiner's attention is called to the enclosed circular put out by the Webster Electric Company, in which there is a cut on the inside of the first page containing the notice "Podlesak Patents," thus showing that the company which owns or controls the Milton patent is also the chief party in interest in the Podlesak patent. This being the case, the Examiner will see that the applicant would prefer to determine definitely the question of the interference with Podlesak before the interference is formally declared between applicant and the patent to Milton. If further evidence is required by the Examiner, tending to show that the same parties are interested in both of these patents as opposed to the interests of applicant, such evidence will be given in the form of affidavits upon request, and it is hoped that the office will, for the reasons given, delay the declaration of interference between applicant and Milton until the question of the declaration of the Podlesak interference be determined.

The applicant and his attorneys have most carefully considered the Examiner's reasons as set forth in the letter of August 6th, in which the Examiner has rejected the claims made by applicant for the purpose of obtaining an interference with Podlesak, on the ground of "lacking foundation." Applicant is in entire accord with the Examiner with respect to the slight difference in the suggested mode of operation of applicant's device, and the suggested mode of operating the Podlesak device as set forth in the Podlesak specification, but applicant is likewise astounded that the Examiner should reject his claims made for the purpose of securing the interference with Podlesak on the ground that there is a slight difference in operation, when the facts are in the first place that, structurally, Podlesak and applicant are identical. All it is necessary to do with the Podlesak device as shown and described in his patent, to make it operate just as applicant has described the preferred mode of operating his device, is to adjust the anvil or screw 35, which is shown threaded and adjustable in the arm 32, until points 3 and 4 of Podle-

sak (see Fig. 2) come together. Such an adjustment may cause the anvil 35 to be separated from the arm 31 of Podlesak during the period when the rotor is at rest, just as applicant has described the preferred adjustment and manner of operating his device. Now on the other hand, all that it is necessary to do with applicant's device to make it operate like Podlesak, is to adjust the anvil or screw 29 downwardly toward the arm 30 until contact takes place when the rotor is in a state of rest, and since the spring 28 controlling applicant's movable electrode is of less resisting power than the springs of the rotor, obviously the effect of such an adjustment will be to separate the points 10 and 26 just as Podlesak states in his patent he prefers to operate his device. Now as a matter of fact, it matters not just how this anvil is adjusted, and the Kane specification states that it is intentionally made adjustable. On typewritten page 3, beginning at about line 15, it is stated that the anvil 29 is threaded, and "is adjustably mounted on the free end of arm 27, so that timing of the engine may be varied slightly by such adjustments." Of course the applicant did not go ahead and state that, by screwing this anvil down somewhat nearer the limit of its adjustment, he could cause the electrodes to remain out of contact when the rotor is in a normal position, if such a thing was desirable, and he supposed that anyone would know enough to do this when he had provided such an adjustment. The facts are that applicant does not prefer to have his device adjusted so that the points will remain normally separated, and in this connection we would call the Examiner's attention to the fact that it appears that even Podlesak himself does not desire to have the anvil of his device so adjusted that the electrode will remain separated when the rotor is at rest. As proof of this, applicant calls the Examiner's attention to the enclosed circular of the Webster Electric Company, which controls the Podlesak patents and manufactures under them, as will be seen by the notice on the cut on the inside of this circular, and as stated on the third page of the circular where we have underlined it in ink. On the third page of this circular the Examiner's attention is called to the paragraph we have designated by the reference character "Z," as follows: "Igniter points which remain closed at all times except when spark is made, preventing moisture by particles of carbon collecting on them. Hammer blow in opening the points, which gives greatest spark efficiency."

Now the applicant has carefully examined the Podlesak claims, and cannot agree with the Examiner that claims 13 to 15 inclusive, and claims 19 to 24 inclusive, which applicant has made in his case as Nos. 7 to 15 inclusive, are limited to any such feature as the Examiner would imply from the language in the last letter.

Applicant contends that he was the prior inventor of this structure, and he will offer proof of this when the opportunity presents itself, and will attempt to show that he made this invention years prior to the filing of the first Podlesak application upon which this re-issue was based, and that Podlesak was in the employ of the Webster Electric Company, where applicant made his invention, and that Podlesak knew of this invention because it was

communicated to him by applicant. Under these circumstances, therefore, it will be seen that if applicant is denied making these claims on his prior structure, he will be put in the position of having Podlesak later contend that applicant's structure is an infringement of these claims of Podlesak. Applicant has, with his counsel, carefully considered these claims, and is advised by counsel that these claims 7 to 15 inclusive which he has made, do, in fact, read upon his structure. In other words, applicant contends, and is advised by his counsel, that it is not necessary that his anvil shall be adjusted to the position of the anvil shown in the Podlesak patent in order that his structure may be responsive to these claims. Taking up the claims seriatim, it will be seen that every element of claim 7 (Podlesak 13) combined and co-operating for the purposes set forth in the claim, is found in applicant's construction. The "relatively fixed and movable electrodes" 3 and 4 of Podlesak are responded to by the fixed and movable electrodes 10 and 26 of applicant. "An arm on the movable electrode," which is the arm 32 of Podlesak, is the arm 27 of applicant. "A generator having a rotor" is found in the rotor 17 of applicant, which functions exactly as the rotor 20 of Podlesak. "An arm connected therewith," which is the arm 31 of Podlesak, is the arm 30 of applicant. "Spring means tending to hold the *motor* in a given position," which is Podlesak 23, is responded to by either spring 31 or 32 of applicant. "Spring means of less tension than the first mentioned means and operating on the first mentioned arm to hold the same in engagement with the second mentioned arm," is spring 33 which tends to draw the arm 32 of Podlesak toward the arm 31 attached to the rotor, and is found in applicant's construction in spring 28, which normally presses the arm 27 toward arm 30, rigidly secured to the rotor. This would seem to be the only element upon which there could be the slightest quibble, and surely the Examiner does not mean to contend that the spring 28 of applicant does not hold the arm 27, and its anvil thereon, in engagement with the arm 30 which moves with applicant's rotor. It is true that applicant shows the anvil so adjusted that there is a slight gap between the arm 30 and the anvil of the arm 27 when the rotor is perfectly at rest, but the language of claim 7, corresponding to claim 13 of the Podlesak patent, is not limited to a construction in which the arm of the movable electrode is held in contact with the arm on the rotor all the time. It will certainly be sufficient to meet the terms of this claim if this spring functions so as to hold the arm on the movable electrode in engagement with the rotor at any time. Let the Examiner stop and think for a moment what is the function of this light spring 28. Is it not to rotate the movable electrode, and cause the arm 27 to be resiliently sustained and resiliently supported in the direction of the strike arm 30 of the rotor? Insofar as this claim is concerned, it is immaterial whether the points of the electrode rest together when the rotor is at rest, and so resist the action of the comparatively weak spring, or whether the parts be so adjusted as Podlesak shows them in Fig. 3 of the drawing of his re-issue patent, and the arm of the movable electrode contact with the arm

on the rotor before the points come together, thus holding the points normally slightly separated at the time that the rotor is at rest.

The Examiner's attention is called to the fact that, electrically speaking, there is no difference in the operation of these devices, whether the anvils or screws be adjusted so that the gap is between the points of the electrodes when the rotor is at rest, as Podlesak indicates the adjustment in his re-issue patent, or whether the anvils be adjusted so that the gap will take place between the strike arm on the rotor and the anvil on the arm of the movable electrode with the points in contact when the rotor is at rest. It is submitted that it is incorrect for the Examiner to infer that Podlesak's claims are limited to the adjustment that he shows of his parts with the arms "in normal contact." If there is any such limitation as this in claim 13 of Podlesak, which is claim 7 of applicant, the Examiner is respectfully asked to point it out. Finally in considering claims 7 to 13, the Examiner's attention is called to the fact that the element called a trip device, for actuating the rotor, is found in applicant's device just as in Podlesak's, and as to this element it is believed there is no dispute.

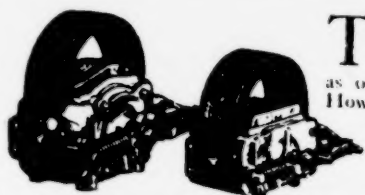
It is not thought necessary to take up the remainder of the claims in detail, except to say that the only possible element of claim 8, which is claim 14 of the Podlesak patent, about which there can be any contention by the Examiner, is the element "spring means of less tension than the first mentioned means and operating on the first mentioned arm to hold the same in engagement with the second mentioned arm." Analyzing this element, it will be seen that applicant's spring 28 is the weaker spring of the two sets of springs, and it operates on the movable electrode arm to hold the same in engagement with the second mentioned arm. The Examiner cannot deny this, because as soon as the trip device operated by the engine, moves the arm on the rotor against the action of the rotor controlling springs, the rotor will return when released, and regardless of how the anvil or screw may be adjusted, the parts will be in contact, and the light spring on the movable electrode will hold the parts in engagement during the rebound or return of the rotor. In this respect the Kane device responds completely to the language of this claim 8, as it does to claim 7, because there is not a word said in the claim that would tend to limit the time that this engagement is to take place, and since it is a positive engagement between the two parts during the return movement of the rotor, it is thought there can be no question but that this claim reads as well upon applicant's device as upon the device of the Podlesak patent, which latter is, in fact, applicant's device.

As supporting applicant's contention, the Examiner's attention is called to claim 15 of the Podlesak patent, applicant's claim 9, which, it is understood, the Examiner has also rejected. The language of the element of this claim under consideration is: "a spring tending to hold the arm of the electrode into engagement with the arm of the rotor." Surely the Examiner will not contend that the light spring on the movable electrode of Kane does not "tend" to hold the arm of the electrode into engagement with the arm of the rotor,

although there may be part of the time that this tendency does not cause the complete engagement of the parts. It is submitted that the language of this claim is satisfied when this tendency is sufficient to bring the parts into engagement during a portion of the movement of the parts. In fact, applicant will go even further, and states that it is believed his construction would satisfy the language of the claim even though the arm on the rotor and the arm on the movable electrode never touched each other, if the parts could be so adjusted as to be operated in this way, which, of course, is an absurdity, but no more absurd than the Examiner's position appears to the applicant in holding that these claims have no foundation in applicant's disclosure.

Referring to claim 19, which is claim 10 of applicant, the element "spring means of less tension than the first mentioned means, operating on the first mentioned arm to hold the same in engagement with the second mentioned arm" is certainly found in the relatively weak spring 28 of applicant, which unmistakably holds the electrode arm in engagement with the arm on the rotor during the return movement of the rotor, or at least, during a considerable portion of that movement. This spring holds the parts together as they move together to separate the points of the electrode, and prevent the too rapid separation of the electrodes; and also this spring insures the return of the electrodes together upon the release of the arm on the rotor. It is not thought necessary to quote more than a small portion of this same language found in claim 20, applicant's No. 1, referring to this same "spring means operating on the first mentioned arm to hold the same in engagement with the second mentioned arm." This is believed to be as completely responsive to applicant's construction as to the construction of Podlesak for the reasons stated. The Examiner will notice that claim 21, applicant's claim 12, referring to the spring, uses also the word "tending" and for reasons already stated in connection with the discussion of claim 15, it is submitted this claim should be indicated as allowable to applicant. Claims 22 and 23 of Podlesak, applicant's claims 13 and 14, both contain the language: "an arm on said movable electrode adapted to engage with the first mentioned arm." Of course this is found in applicant's device just as in the Podlesak device, because applicant's electrode arm is as much adapted to engage the arm on the rotor as is Podlesak's. In fact, that is the purpose for which it was designed, just as Podlesak's arm was designed for that purpose. Claim 13 has the element: "spring means for bringing the said two arms into engagement," and this is the light spring which brings the arm of the movable electrode normally to a position, and holds it in that position where the arm on the rotor can engage it; and furthermore, this light spring on the moveable electrode holds the arm thereon in engagement with the arm on the rotor during the combined return or rebound movement of the rotor arm, thus showing conclusively that this spring is the means for bringing the two arms into engagement regardless of how the anvil or screw may be adjusted. The language of claim 14, Podlesak 23, in this respect is identical with the language of claim 13, and the language of claim 15, Podlesak 24, in this respect is similar.

The Wonderful



THE WEBSTER TYPE "K" magneto is of the oscillating type and embodies the same principle as other WEBSTER MAGNETOS. However, it differs in construction and is also considerably smaller. This machine was designed especially for engines of one, two and three horse-power. The WEBSTER MAGNETO is an innovation in

the magneto field in view of the fact that it is sold complete with attachments ready to put on the engine. This feature in the smaller magneto, Type "K", will be a big help to engine manufacturers, their jobbers, dealers and the ultimate purchaser. It might be said here that the Webster Company is the only concern which can furnish a complete ignition outfit ready to put on an engine.

WEBSTER MAGNETOS are reasonable in price, especially Type "K", which was produced so that manufacturers who find it necessary to equip their smaller engines with magnetos can do so and have the very best ignition apparatus.

The WEBSTER Type "K" was made possible by the use of the Podlesak patents, the main principle being a tripolar arranged field with a four-pole inductor. With this construction very little motion is necessary to operate the magneto so as to obtain an extremely hot spark. No brushes, moving wires or collector rings are used, so that the machine

The Webster Electric Co..

1147
Kare
Podlesak } page 81

New Type "K"

is thoroughly water, weather and oil proof. This in itself assures the operator of the engine that he will have a spark under all conditions. Although these features are the leading ones covered by the Podlesak patents, there are numerous others which aid toward the easy handling of an engine.

SPECIFICATIONS.

MAGNETS are of the highest grade Tungsten steel and made in the Webster factory.

SHAFT is one piece $\frac{1}{2}$ inch diameter, and ground to size.

INDUCTOR is made of laminated special electric steel and riveted electrically. It is keyed up the shaft by a Woodruff key and cannot possibly shift.

PISTON RINGS are made of laminated special electric steel and riveted electrically.

BEARINGS are bronze and lubricated by capillary attraction.

SPIDERS are of bronze.

PUSH FINGER and **SPRING ARM** drop forged tool steel.

COILS are stationary and are wound of cotton and enamel insulated wire and after being thoroughly processed in insulating varnish are taped and processed again before putting into the machine.

PLUG: By years of experience the Webster Company have proven in the world that mounting the magnets on a bracket which is a part of the igniter plug is the best and

simplest practice. The WEBSTER plug is thoroughly covered by patents and we list herewith some of its features:

Three point suspension which allows for the removing and replacing of the plug without changing the timing of the magnets on the engine.

Igniter points which remain closed at all times except when spark is made, preventing moisture or particles of carbon collecting upon them.

Hammer blow in opening the points which gives greatest spark efficiency.

Positive coil spring which makes it extremely difficult for the movable electrode to stick.

The WEBSTER MAGNETO can be truthfully called the "Crankless Engine Starter" and is equipped with a starting lever which is used to trip the magnets by hand. This feature is used on all types of the WEBSTER line.

WEBSTER MAGNETOS have no moving wires, brushes or rubbing contacts and are not affected by oil or water.

Racine, Wisconsin, U. S. A.

1147
Kane
Podlesak } page 82.



THE WEBSTER ELECTRIC COMPANY

RACINE, WISCONSIN
U.S.A.July
Nineteen
Fourteen

DEAR SIR

on the following pages we take pleasure
in presenting to you information about
WEBSTER MAGNETOS, principally, however,
type "K".

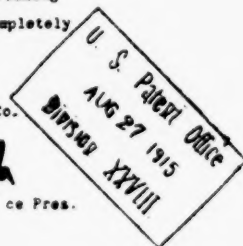
If you will spend three minutes reading
it, we believe you will find that it completely
solves your ignition problem.

Yours truly,

The Webster Electric Co.

By

ice Pres.



1147
Have
Pillars } page 83.



Reconsideration and allowance of these claims of applicant is requested.

If the Examiner has any difficulty in understanding the mode of operation of applicant's device as explained in connection with the claims above discussed, or if the Examiner is unable to agree to the fullest extent with applicant's position in this matter, applicant requests that the Examiner accord him an opportunity to appear in his presence with his attorney for a hearing in regard to this matter, when a model or full-sized device of the Kane magneto may be produced and operated, and compared with the structure of the Podlesak patent, which latter may also be presented in the form of a model or full-sized device if the Examiner so desires.

Respectfully submitted,

Brown, Nissen & Sprinkle, Attorneys for Applicant.
Chicago, Illinois, August 23,
1915.

(Here follow diagrams marked pages 992, 993 and 994.)

Mail Room,
Sep. 3, 1915,
U. S. Patent Office.

Docket Clerk,
Sep. 3, 1915,
U. S. Patent Office.

Serial No. 2097, Paper No. 9.

In the United States Patent Office

Before the Commissioner

Re Application of Edmund Joseph Kane. Electric Igniters. Filed
January 14, 1915. Serial No. 2,097

In view of the report of the Ex'r dated Sep. 8, 1915, the petition is denied. Sep. 15, 1915. Thomas Ewing, Commissioner of Patents.

PETITION

To the Commissioner of Patents:

Your petitioner, the applicant in the above entitled application, avers:

First. That on or about August 24, 1915, claims 1-6 inclusive of this application were placed in interference with the patent No. 1,096,048, dated May 12, 1914, for Magneto-Generator, granted to John Lewis Milton, interference No. 39,013.

Second. That the Examiner of Interferences ruled that the statements under Rule 110 in this case must be filed on or before September 27, 1915.

Third. That claims 7-15 inclusive of said application are still being prosecuted before the Examiner of Division 28, with a view of placing said claims 7-15 in interference with re-issue patent No. 13878 for Current Generator and Igniters for Internal Combustion Engines, granted to Emil Podlesak.

Fourth. That the real party in interest in the Milton patent No. 1,096,048, and the real party in interest in the Podlesak re-issue patent No. 13878, are one and the same party; namely, The Webster Electric Company, having offices and factories at Tiffin, Ohio and Racine, Wisconsin.

Fifth. That if said Milton is given access to applicant's file wrapper and contents before claims 7-15 inclusive in said application are placed in interference with said Podlesak patent or otherwise disposed of, and an interference is declared later between said claims 7-15 and said Podlesak's re-issue patent, the party controlling the Podlesak patent, The Webster Electric Company, will be given access to the file wrapper and contents of applicant before said Podlesak files his statement under Rule 110, thereby defeating Rule 111, and exposing the filing date of applicant's original application, Serial No. 514,428, filed February 2, 1910, of which the above mentioned application is a division, to Podlesak before said Podlesak is entitled to it, to applicant's great injury.

Wherefore your petitioner requests:

First. That the time for filing the statement under Rule 110, and opening of Kane's file wrapper and contents to Milton in interference No. 39013, between Kane and Milton, be extended from month to month until claims 7-15 inclusive of the application above mentioned have been placed in interference with said Podlesak patent or otherwise disposed of, for the reasons mentioned.

Second. That the Examiner of Division 28 be instructed to act as promptly as possible on said claims 7-15 of the above mentioned application, in order to prevent unnecessary delay in the prosecution of interference No. 39013 between Kane and Milton.

Oral hearing of this petition is hereby waived.

Remarks

It is not the purpose of this petition to delay the prosecution of interference No. 39013 between Kane and Milton, but it is the purpose to facilitate the prosecution of claims 7-15 of applicant's application Serial No. 2097, filed January 14, 1915, so that said claims will either be placed in interference with said Podlesak re-issue patent, or otherwise disposed of before applicant's record will be opened to said Milton, for the reason that Milton has licensed The Webster Electric Company, of Tiffin, Ohio, and Racine, Wisconsin, to manufacture Electric Generators under his patent, and that said Podlesak has also licensed said The Webster Electric Company to manufacture Electric Igniters under his patent. It is therefore obvious that, if applicant's record is thrown open to Milton, Podlesak will be apprised of applicant's original filing date before he is entitled to the same.

Soon after the time that applicant made his invention set forth in the above referred to application, he disclosed the same to John L. Milton, the patentee Milton above referred to, and Emil Podlesak, the patentee Podlesak above referred to, who were in the employ of The Webster Electric Company in the Experimental Department thereof. At that time The Webster Electric Company was not interested in this invention, for the reason that there was no demand yet for such Electric Igniters. After the applicant had made a number of his Igniters, and showed the advantages thereof, said Milton applied for his patent, and licensed The Webster Electric Company to manufacture said Electric Igniters. Then later Podlesak made application for his patent, and also licensed The Webster Electric Company to manufacture under his patent. As evidence that The Webster Electric Company is manufacturing under both of these above mentioned patents, applicant is here with submitting a catalogue published by The Webster Electric Company, entitled "Webster-Milton Low Tension Magneto." In this catalogue is shown a number of views which show applicant's construction very clearly. This catalogue also refers to the Milton patents. Applicant is also enclosing a catalogue published by The Webster Electric Company, entitled "Webster Magnetos." On the front cover of this catalogue is the picture of a Magneto with the words "Podlesak Patents, Simplest" indicated on the picture of the Magnetos. In this catalogue a number of references are made to the Podlesak patents, both on the cuts and in the reading matter. These catalogues show that The Webster Electric Company is the real party in interest in both of these patents, and it is urged that it would not be fair to Kane to have his record exposed to said The Webster Electric Company before an interference was declared between claims 7-15 of this case and the Podlesak patent above referred to, if applicant is entitled to such a declaration of interference on his record. It is therefore urged that Milton be not allowed to see applicant's file wrapper and contents until it is determined whether or not an interference will be declared between applicant's claims 7-15 in the above application and the re-issue patent of Podlesak above mentioned.

To strengthen the contention that both Podlesak and Milton have licensed The Webster Electric Company, an affidavit of your petitioner will be forwarded within a few days, and before this case is reached for action, enumerating such facts as will show the above.

Your petitioner is forwarding in this same mail a stipulation signed by the counsel for Kane and counsel for Milton, stipulating an extension of ten (10) days for filing the statement under Rule 110 in interference No. 39,013. Your petitioner will use every endeavor to co-operate in obtaining a disposal of claims 7-15 of his application, either by having these claims placed in interference with Podlesak or otherwise finally disposed of, in order to facilitate the prosecution of the questions in issue.

Respectfully submitted,

Brown, Nissen & Sprinkle, Attorneys for
Kane. Chicago, Illinois, Sept. 1, 1915.

Docket Clerk,
Sep. 7, 1915,
U. S. Patent Office.

Mail Room,
Sep. 7, 1915,
U. S. Patent Office.

Serial No. 2097, Paper No. 10

In the United States Patent Office

Before the Commissioner, on Petition

Re Application of Edmund Joseph Kane, Electric Igniters. Filed
January 14, 1915. Serial No. 2097

AFFIDAVIT

Edmund Joseph Kane, the applicant in the above entitled application, being duly sworn, deposes and says that he is informed and believes that The Webster Electric Company, having offices and factories at Tiffin, Ohio, and Racine, Wisconsin, and formerly having a factory and office at Chicago, Illinois, is manufacturing and selling Electric Igniters embodying his invention as disclosed in his application above referred to; that he is informed and believes that said The Webster Electric Company is manufacturing and selling said Electric Igniters under licenses given it by John L. Milton under U. S. Letters Patent No. 1,096,048, and Emil Podlesak under re-issue patent No. 13,878; that he has seen and examined Magneto Generators manufactured by The Webster Electric Company, which bore markings thereon purporting to give notice that such Magneto Generators were made and sold in accordance with said Milton patent, and other Magneto Generators manufactured by The Webster Electric Company, which bore markings thereon purporting to give notice that such Magneto Generators were made in accordance with said Podlesak patent, all of which Magneto Generators embodied applicant's invention as disclosed in his application above mentioned; and that he disclosed his invention as set forth in the above entitled application to both John L. Milton and Emil Podlesak, the above named patentees, long before either Milton or Podlesak made application for their above mentioned patents, and while said Milton and Podlesak were in the employment of The Webster Electric Company, in the Experimental Department thereof, in an endeavor to interest The Webster Electric Company in affiant's invention.

Edmund Joseph Kane.

Sworn to and subscribed before me this 3rd day of September, 1915.

R. P. Madill, Notary Public. [Seal.] My
Commission Expires November 8th,
1917.

Letter No. 11

Department of the Interior,
United States Patent Office,
Washington, September 8, 1915.

In re Application of Edmund Joseph Kane. Serial Number 2097.
Filed Jan. 14, 1915. Electric Igniters

Hon. Commissioner of Patents,

SIR: Claims 7 to 15 of this application, which are identical with certain claims in Reissue Patent 13,878 to E. Podlesak, have been rejected on the ground that they lack foundation in this application as filed.

The structure disclosed in this application, by giving a sufficient range of adjustment to the "anvil 29" and by properly proportioning the spring 28 relative to springs 31 and 32, can be made to support the said claims. The specification, however, does not disclose to what extent the "anvil" is adjustable; nor does it disclose the fact that the spring 28 is of less tension than springs 31 and 32. Since the application does not afford sufficient foundation for the claims in question, I think the proposed interference should not be declared.

Respectfully,

Div. 28, Room 63,

A. R. Benson, Examiner.

Mail Room,
Sep. 20, 1915,
U. S. Patent Office.

U. S. Patent Office,
Sep. 21, 1915,
Division XXVIII.

Serial No. 2097, Paper No. 14

In the United States Patent Office

Division 28, Room 63

Edmund Joseph Kane. Electric Igniters. Filed January 14, 1915.
Serial No. 2097

The Commissioner of Patents, Washington, D. C.

SIR: The above entitled application is amended as follows:—
In the description, Page 4, line 14, cancel "and," first occurrence. Line 16, before "This," insert—Spring 28 is of less tension than springs 31 and 32, as clearly indicated in Fig. 2, so that contact 26 will be moved away from contact 10 against the influence of spring 28 by member 30 on the return movement of the latter given it by springs 31 and 32 as above mentioned.

Same page, between lines 24 and 25, insert—

In some instances it is desirable to adjust the parts so that the contact 26 is normally out of engagement with contact 10. To make such an adjustment the anvil 29 is adjusted toward member 30 until arm 27 and contact member 26 are moved to separate contact 26 from contact 10. Since spring 28 is of less tension than springs 31 and 32, the latter springs will resist the force exerted by spring 28 on arm 27 and prevent contact 26 from engaging contact 10 while said parts are at rest or in their normal condition. This adjustment of said parts is not shown in the drawing since it will be apparent from the adjustment shown, see particularly Fig. 2. When adjusted as just referred to, spring 28 will move contact 26 into engagement with contact 10 as soon as plunger 36 moves arm 35 and member 30 a short distance. The contacts will be held together by spring 28 until member 30 returns and engages anvil 29 of arm 27 to separate the contacts for forming a spark in the same manner as the first-mentioned adjustment of Δ parts.

REMARKS

This application has been amended to overcome the objection made by the Examiner in his report of Sep. 8, 1915 to the Commissioner of Patents, on Petition. It is thought that this amendment will overcome said objections and provide sufficient foundation for claims 7 to 15 inclusive.

It is noted that in the description as originally filed, it is not specifically stated that spring 28 is of less tension than springs 31 and 32, but in the drawing spring 28 is shown as being made of considerably smaller material than either one of springs 31 and 32. Furthermore, in applicant's original application, Ser. No. 541,428, filed Feb. 2, 1910, of which the present case is a division, a description of the action of springs 28, 31 and 32 and their connecting parts is given on page 9 in lines 13 to 25 inclusive. In this original description it is not specifically stated that the spring 28 is of less tension than springs 31 and 32, but it states that member 30 is returned against the influence of spring 28. Since inertia is produced in member 30 by the action of springs 31 and 32, and such inertia causes spring 28 to yield to open the contacts, it necessarily follows that spring 28 must be of less tension than springs 31 and 32. It is therefore thought that this idea is sufficiently disclosed in the original description to merit the specific statement now presented in this amendment relative to the tensions of said springs.

The adjustment referred to in the second paragraph of the amendatory matter of this amendment, does not require formation of any of the parts different from that already shown. This adjustment simply consists in turning the anvil 29 in its threaded connection of arm 27 until the lower end of the anvil moves arm 27 and the shaft portion of member 26 to disengage the contact portion of member 26. It is an elementary proposition that applicant is entitled to such ad-

justments and uses as his device is capable of, and it is therefore urged that he is not setting up any new matter in the matter of the present amendment.

With the adjustment of applicant's device, which is clearly set forth in the second paragraph of the amendatory matter, presented herewith, applicant's device is directly readable on present claims 7 to 15 which are claims 13 to 15 and 19 to 24 inclusive of the reissue patent No. 13,878 dated Feb. 9, 1915, of Emil Podlesak. In view of this fact, it is urged that the interference between this application and the said Podlesak patent, be declared.

It is not thought necessary to add a new figure to the drawing showing the adjustment referred to in the present amendment, since such an adjustment is perfectly obvious from the disclosure of Figs. 2 and 3.

An affidavit executed by applicant is herewith enclosed setting forth the fact that the amendatory matter of the present amendment was part of his original invention.

Respectfully submitted,

Brown, Nissen & Sprinkle, Attorneys for
Applicant, Chicago, Ill., September
18, 1915.

Mail Room,
Sep. 20, 1915,
U. S. Patent Office.

U. S. Patent Office,
Sep. 21, 1915,
Division XXVIII.

In the United States Patent Office

Division 28, Room 16

Edmund Joseph Kane, Electric Igniters, Filed January 14, 1915,
Serial No. 2,097

SUPPLEMENTAL OATH

Edmund Joseph Kane, the applicant in the above entitled application, being duly sworn, deposes and says that the subject matter of the amendment enclosed herewith and of even date with this oath, was part of his invention, was invented before he filed his original application for such invention, application Serial No. 541,428, filed Feb. 2, 1910, of which the above entitled application is a division, was not known or used before his invention, was not patented or described in a printed publication in any country more than two years before said original application, was not patented in a foreign country on an application filed more than twelve months before said application, was not in public use or on sale in this country more than two years before the date of said application, and has not been abandoned.

Edmund Joseph Kane.

Sworn to and subscribed before me this 18th day of September, 1915.

Thomas Colson, Notary Public. (Seal.)

Docket Clerk,
Oct. 6, 1915,
U. S. Patent Office.

Mail Room,
Oct. 6, 1915,
U. S. Patent Office.

Serial No. 2097, Paper No. 15

Recorded, Vol. 118, Page 44

In the United States Patent Office

Before the Commissioner

On the report of the Exam'r of even date the petition is Denied.
Oct. 9, 1915.

Thomas Ewing, Commissioner of Patents.

In re Application of Edmund Joseph Kane, Electric Igniters.
Filed Jan. 14, 1915. Serial No. 2097

PETITION

The Commissioner of Patents:

Your petitioner, the applicant in the above entitled application, avers—

First, that on September 4, 1915, he petitioned the Commissioner, requesting that the time for filing the statement under Rule 110, and opening of Kane's file wrapper and contents to Milton in interference No. 39013 between Kane and Milton, be extended from month to month until claims 7 to 15 inclusive of Kane's application might be placed in interference with Podlesak's re-issue patent No. 13878, or otherwise finally disposed of, and that the Examiner of Division 28 be instructed to act as promptly as possible on claims 7 to 15 inclusive of Kane's application in order to facilitate the prosecution of interference No. 39013, and set forth his reasons for such request.

Second, that on September 15, 1915, the Commissioner denied said petition, basing his denial on the Examiner's report dated September 8, 1915.

Third, that on September 18, 1915, your petitioner amended his description to overcome the objections pointed out in said Examiner's report, and that said amendment has not been acted upon by the Patent Office to the best of applicant's knowledge and belief.

Wherefore your petitioner requests that the statements under Rule 110 in the interference between Milton and Kane, No. 39,013, be kept sealed, and the file wrapper and contents of Kane's application in said interference be not exposed to the opposite party until after claims 7 to 15 inclusive of Kane's application be finally disposed of before the Primary Examiner in charge thereof.

Oral hearing on this petition is hereby waived.

REMARKS

Applicant amended his description to make it state positive features which would make claims 7 to 15 inclusive in applicant's application read as well on his application as on the Podlesak re-issue patent No. 13,878. Accompanying this amendment, in applicant's remarks he pointed out that the matter inserted by this amendment was inferentially set forth in the description and positively shown in the drawings in the original application, of which applicant's present application in said interference is a division. It is thought that this amendment will overcome any question of whether or not applicant's description discloses the subject matter of claims 7 to 15 inclusive in applicant's application in said interference.

The reason of applicant's request for having claims 7 to 15 inclusive of his application finally disposed of before the statement under Rule 110 and the file wrapper and contents of his applications are open to Milton, was clearly set forth in his petition, which was dated September 1, 1915, and the sworn statement of applicant executed September 3, 1915. With this amendment were also submitted two catalogues published by the Webster Electric Company, which is manufacturing devices under licenses from said Milton and said Podlesak. It is also noted, and is a matter of record, that the attorney for Milton is the attorney for Podlesak in their patents in question. For the above reasons it is requested that Kane's file wrapper and contents and statement under Rule 110 be withheld from Milton until claims 7 to 15 inclusive of applicant's application, Serial No. 2097, be finally disposed of, so that Podlesak, his attorney of record and the Webster Electric Company, the party of interest in the Milton patent, may not have access to applicant's record until he is entitled to same under Rule 111.

It is therefore urged that this petition be granted and such orders given as will bring about the request of this petition.

Respectfully submitted,

Brown, Nissen & Sprinkle, Attorneys for
Applicant. Chicago, Illinois, October
4, 1915.

Commissioner
of Patents.
Received Oct. 9, 1915.

Serial No. 2097, Paper No. 16

In the United States Patent Office

Before the Hon. Commissioner of Patents, on Petition

In re Application of Edmund Joseph Kane. S. No. 2097. Filed
Jan. 14, 1915. Electric Igniters

EXAMINER'S STATEMENT

Claims 7 to 15 of the above noted application were rejected Aug. 6, 1915, on the ground that they lacked foundation in the case as filed.

On Aug. 24, an interference involving the said application was declared.

On Sept. 8, 1915, by direction of the Commissioner, the said claims were reconsidered in view of certain arguments advanced by applicant. Said reconsideration, however, failed to change the examiner's opinion on the question of foundation.

On Sept. 20, 1915, applicant presented a proposed amendment to his specification; which amendment, according to office rules, has been placed in the file wrapper of the application, but not yet entered therein.

The proposed amendment and the arguments made in connection therewith have been considered by the examiner, and he is still of the opinion that the original specification does not afford sufficient foundation for claims 7 to 15, inclusive.

A. R. B.

Oct. 9, 1915, Div. 28, Room 63.

Brown, Nissen & Sprinkle, 312 So. Dearborn St., Chicago, Ill.

A. R. Benson, Examiner.

Letter No. 19

Department of the Interior,
United States Patent Office,
Washington, October 18, 1915.

Hon. Commissioner of Patents,

SIR: It is requested that jurisdiction of the application of E. J. Kane, Serial Number 2097, now involved in Interference No. 39,013, be restored to the Primary Examiner for the purpose of placing the

same in interference with the reissued patent No. 13,878 to E. Podlesak. Respectfully,

A. R. Benson, Examiner.

Div. 28, Room 63.

Approved Oct. 18, 1915.

J. T. Newton, First Assistant Commissioner.

Application Room,
Oct. 18, 1915,
U. S. Patent Office.

U. S. Patent Office,
Oct. 18, 1915,
Division XXVIII.

20

B

In the United States Patent Office

Div. 28, Room 63

Edmund Joseph Kane. Electric Igniters. Filed January 14, 1915.
Serial No. 2097

The Commissioner of Patents, Washington, D. C.

Sir: Conforming to the requirements of the Examiner having this application in charge, as expressed at an oral interview on Saturday, Oct. 16, 1915, in regard to the official letter of August 6, 1915, rejecting claims 7 to 15 inclusive as lacking foundation and as further expressed in the Examiner's Reports of Sept. 8, 1915, and Oct. 9, 1915, on Applicant's petition to The Commissioner, the Applicant requests that the Amendment dated Chicago, September 18th, 1915, be entered in the following modified form:

Page 2, following the word "on" in line 3 from the bottom, erase the remainder of the sentence in this and the following line and insert the following:

B. \sqrt supporting block 25 which is secured by set screw 25^a to the bearing member or bracket on or in which the magneto generator is mounted, thus rendering the magneto generator proper, detachable from its firm supporting base, shelf or bracket formed integrally with ignition block or plug 8 as described.

\sqrt Same page, last line, change "a" to is.

\sqrt Page 3, line 4, change "extension" to supporting \sqrt block.

\sqrt Line 5, change "by a" to at the, and after "25^a" \sqrt insert or other suitable fastening means.

\sqrt Line 10, after "through," insert and beyond. Lines \sqrt 12 and 13, change "resting on" to encouraging.

✓Line 22, change "contact" to contacts. Last line ✓change "close" to in striking relation; and after numeral 29 place a comma and insert;

B¹¹. the position of the anvil varying obviously with its described adjustment.

Page 4, line 17 after "engine" insert the following paragraph—

B³. By referring to the preferred embodiment of my invention as depicted in the drawing it will be seen that the single spring 28 is, due to the manner of its connection with the movable electrode shaft and the igniter block 8, of the torsional class of springs, while the multiple springs 31, 32, acting cumulatively upon the oscillating yoke member, 30 are tension springs exerting their combined elastic resistance to tension upon yoke member 30 whenever it is oscillated from its normal position of rest. Furthermore, while torsion spring 28 is shown formed of a much smaller grade of spring wire than the multiple tension springs 31, 32, it will also be obvious that its relative tensional relation to the combined springs 31, 32 will be greatly diminished by the system of leverages disclosed in the drawings of these associated parts. For example, torsion spring 28 must exert its reaction upon anvil lever 27 at a point relatively close to the fulcrum of this lever while the combined tension of springs 31 and 32 is exerted upon the outer extremities of yoke 30, one of which parts also forms the striker and comes in direct contact with the anvil 29 on arm 27, so that there is no loss of the reacting power of this pair of springs. This multiplies the effectiveness of springs 31, 32 over the torsion springs 28 many times with the result that in the combination of these elements shown in the drawing the reaction of the combined rotor springs is controlling, and when the momentum of the rotor carries it over center obviously the less effectively arranged single spring 28 will yield allowing the igniter points to separate, but closing them quickly when the rebounding effect of the rotor yoke is withdrawn.

In practice, I prefer to adjust the anvil 29, which as shown in the drawings, is of an old and well known form to those skilled in this art, in relation to movable electrode arm 27 and the striking part of the yoke 30, so that when the yoke is at rest it will not influence the position of the movable electrode arm 27 with the result that normally the electrode points will be in contact, which, as well known to those skilled in this art, is desirable in keeping the contact points of the electrodes free from deposits of carbon or other substances on the interior of the engine cylinder that may interfere with the free discharge of the ignition spark between the contacts. An obvious adjustment, however, of anvil 29 to precisely close the normal gap between it and yoke 30, as

shown, for example in Figs. 2 and 3, will not change the described mode of operation of the igniter points, but if the anvil be still further adjusted toward the yoke after the gap disappears, obviously the anvil 27 will rest normally in contact with the yoke and the igniter points will be normally separated by the increased leverage of springs 31, 32 over springs 28, to be closed momentarily when the rotor yoke is rocked or cocked away from it and afterwards quickly separated by the rebound impact of the yoke on its release from operating plunger 36,—

Arrange that portion of the paragraph following the above insertion, beginning with "The," line 17, page 4, and ending with line 24, same page, as a separate paragraph.

Remarks

In view of the above amendment and the probable change in the Examiner's recommendations, as expressed at the said oral interview Applicant is at this date asking for a rehearing of the petitions to the Commissioner under date of Oct. 4, 1915 and Sept. 1, 1915, respectively.

Since this amendment is believed to introduce no new matter not covered in scope by the amendment of Sept. 18, 1915 (Chicago), not entered, it is believed that the oath accompanying said amendment is applicable to the present amendment without revision, but a new oath will be furnished if thought desirable by the Office.

Respectfully submitted,

Brown, Nissen & Sprinkle, Attorneys for Edmund J. Kane, Washington, D. C.,
Oct. 18, 1915.

Paper No. 21

Oct. 26, 1915.

Brown, Nissen & Sprinkle, 312 So. Dearborn St., Chicago, Ill.:

Application of Edmund Joseph Kane. S. No. 2097. Filed Jan. 14, 1915. Electric Igniters. Division of Application No. 541,428. Filed Feb. 2, 1910.

39,181

Count 1. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

Count 2. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a gen-

erator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

Count 3. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor and spring means operatively connected with the rotor for holding the same in a predetermined position.

Count 4. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

Count 5. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted, and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

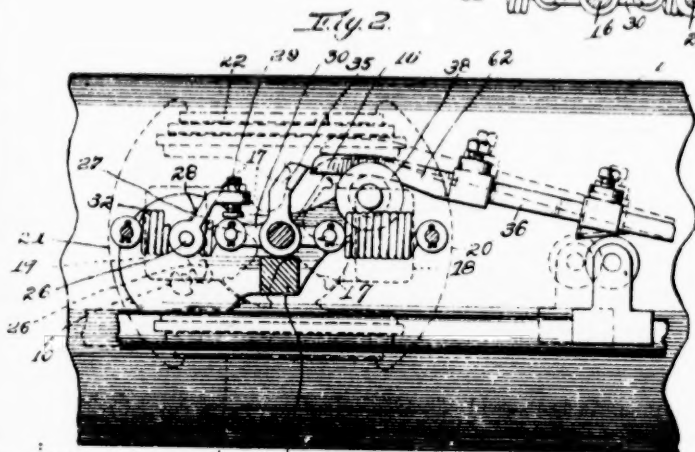
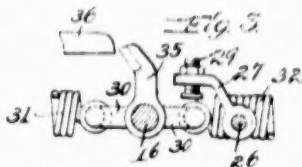
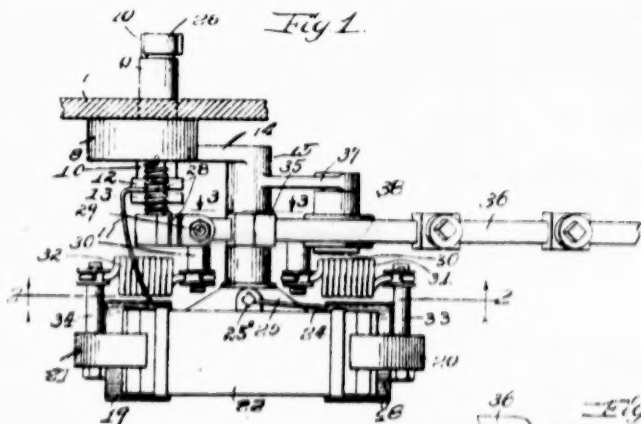
Count 6. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

Count 7. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and

123-163

2097

1009



Witnesses: 23 15
R. L. Farnsworth
D. Cohen

Inventor
Edmund Joseph Kane
By Brown & Henshaw
Attorneys

Kane
Edwards } page 109



a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

Count 8. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

Count 9. The combination of an igniter frame, comprising a body and laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

The interference involves your application above identified and A Patent (Reissue No. 13,878, Reissued Feb. 9, 1915) for Current-Generator and Igniter for Internal-Combustion Engines, to Emil Podlesak, of Racine, Wis., whose attorney is Lynn A. Williams, Monadnock Block, Chicago, Ill.

The relation of the counts of the interference to the claims of the respective parties is as follows:

| Counts. | Kane. | Podlesak. |
|---------|-------|-----------|
| 1 | 7 | 13 |
| 2 | 8 | 14 |
| 3 | 9 | 15 |
| 4 | 10 | 19 |
| 5 | 11 | 20 |
| 6 | 12 | 21 |
| 7 | 13 | 22 |
| 8 | 14 | 23 |
| 9 | 15 | 24 |

A. R. Benson, Examiner. A. R. B.

(Here follows diagram marked page 1009)

APPLICATION FOR U. S. LETTERS PATENT

690,921

\$15 Received Apr. 15, 1912. S. Chief Clerk, U. S. Patent Office

PETITION

To the Commissioner of Patents:

Your petitioner, Emil Podlesak, a citizen of the United States, residing at Tiffin, in the County of Seneca, and State of Ohio, and whose Post Office Address is Tiffin, Ohio, prays that Letters Patent may be granted to him for the improvements in Current Generators and Igniters for Internal Combustion Engines, set forth in the annexed Specification.

And he hereby appoints Chattin Bradway, of Washington, D. C. Victor Bldg., 9th St. & Grant Place, N. W.), Register No. 9477, his Attorneys with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to sign his name to the drawings, to receive the Letters Patent, and to transact all business in the United States Patent Office connected therewith.

Signed at Tiffin, in the County of Seneca and the State of Ohio this 26th day of March, 1912.

Emil Podlesak.

SPECIFICATION

To all whom it may concern:

Be it known That I, Emil Podlesak, a citizen of the United States residing at Tiffin, in the County of Seneca, and State of Ohio, have invented certain new and useful improvements in Current Generators and Igniters for Internal Combustion Engines, of which the following is a specification:

B. E.

Emil Podlesak—Current Generator and Igniter for Internal Combustion Engines

This invention relates to igniters of the make and break type and in which the magneto or current generator is combined therewith as a unitary structure that is fastened to the head or other suitable part of the engine cylinder, the rotor of the generator being operatively connected with the movable electrode of the igniter so that a reciprocatory actuator, push rod or equivalent means operating on the rotor trip finger against the tension of spring means causes the rotor to move to "cocked" position while the electrodes of the igniter are brought together, and then released from such "cocked" position so that the electro-motive force generated by the

sudden return movement of the rotor through the magnetic field of the generator will produce the igniting current whereby the spark is produced between the electrodes in the compression chamber of the engine. The combination of means and instrumentalities above referred to is the subject-matter of my pending application for Letters-Patent of the United States, Serial No. 668,153, filed December 27, 1911, and the present invention relates to improvements especially adapted for combined igniters and generators of the type referred to.

The actuating means for the rotor and movable electrode is mounted on the engine cylinder or other suitable part and is operatively connected with some moving mechanism and has no connection with the magneto or igniter since the actuator, which may be a push rod, rotating or oscillatory arm or the like, merely contacts with the trip finger of the rotor. As the igniter and generator must be removed from time to time for cleaning the electrodes and other reasons, it is of great importance that the igniter and generator be replaced in exactly the same position it was before removal; otherwise, the push rod will not be disposed in proper relation to the trip finger of the rotor to accomplish satisfactory results in the operation of the engine, generator and igniter. The reason for this liability of the igniter being replaced in a different position from that which it originally occupied when all the operating parts were adjusted to accomplish the best results, is due to the fact that the holes in the body of the igniter for receiving the bolts or fastening studs are made larger than the bolts or studs, as is also the opening in the engine cylinder for receiving the body of the igniter, this "latitude" between the parts being provided so as to facilitate easy removal of the igniter and to obviate the necessity of careful and expensive machining and fitting of the parts. By reason of the liability to error in replacing the igniter, there is provided an arm or equivalent means on the igniter body to inter-engage with a fixed part on the engine cylinder, so that there can be but one position in which the igniter can be attached to the cylinder, and that position is the one where the push rod or other actuator is in proper relation to the trip finger of the rotor.

As the result of this arrangement, it is never necessary to adjust the relation of the various instrumentalities in replacing the igniter when it has been removed for cleaning or any other purpose.

In addition to the foregoing objects and advantages, the invention has certain other minor advantages which will appear hereinafter as the description proceeds, in reference to the accompanying drawings, in which,

Figure 1 is a front view of the combined igniter and current generator applied to the head of an engine cylinder, part of the generator being shown in section.

Figure 2 is a front view thereof showing a portion of the cylinder head in section.

Figure 3 is a sectional view on line 3—3, Figure 2.

Figure 4 is a diagrammatic view to show the results of a defective positioning of the igniter with respect to the operating push rod.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawings, A designates the head or other wall of a cylinder of an internal combustion engine; B, the make and break igniter; and C, the magneto current generator of the inductor type.

The igniter B comprises a cylindrical body 1 which passes through an opening 2 in the cylinder head A, the opening being of slightly larger diameter than the diameter of the igniter body, so that the latter can be easily inserted or removed. Passing through the igniter body is a fixed electrode 3 with which co-operates a movable or rocking electrode 4. The outer end of the igniter body is formed with a rhomboidal plate 5, which, as shown in Figure 1, has bolt-receiving openings 6 that are slightly larger in diameter than the fastening bolts or studs 7 that pass through the openings and are fastened to the cylinder head A. Thus, there is considerable latitude allowed between the body of the igniter on the one hand and the cylinder head and fastening bolts on the other, and by reason of this, the igniter body is liable to be fastened to the cylinder head in a variety of positions within the limit of this latitude, the disadvantages of which have been hereinbefore pointed out, but are overcome by the improvements later to be set forth.

Extending from the plate portion 5 of the igniter body is a shelf or bracket 8 which forms a base to which the generator C is removably secured by stud bolts 9. Projecting laterally from the bracket or shell 8 is an arm 10 which is formed at its outer extremity with a boss or enlargement 11 that has a passage through which extends an extension rod 12, the rod being fastened in any desired position by a set screw 13 or equivalent means. The outer extremity of this extension rod is located at a considerable distance from the axis of the igniter, and this extremity is adapted to engage some fixed part of the engine, such for instance as lugs 14 on the arm 15 in which the operating shaft 16 rotates. The lugs 14 are spaced apart far enough for the extension rod to enter between them as the igniter body is inserted in the opening in the engine cylinder, and when thus positioned, it is impossible for the igniter body to shift angularly or around its axis and thereby disturb the proper relation of the igniter and generator operating means. The parts 10, 12 and 14 thus constitute means for insuring the proper positioning of the igniter and the design of the parts is such that no special care or adjustment is required in taking off or replacing the igniter.

The generator C is fully set forth in the pending application hereinbefore referred to, so that only a brief description here is deemed necessary. The generator comprises permanent horseshoe magnets 17 fastened to E-shaped pole pieces 18, on the middle projections of which are generating coils 19. In the present drawings, only one pole piece and coil is shown in Figure 1, the other corresponding parts being concealed from view. Between the pole pieces oscillates a cruciform rotor 20 mounted on a shaft 21 which has at one end oppositely-disposed crank arms 22 which are connected with

springs 23 that assume an alining position through the axis of the rotor when the latter is idle, the outer ends of the springs being fastened to studs 24 on the generator frame. On the opposite end of the rotor shaft is a trip finger 25 which is adapted to have a wiping engagement with a push rod 26 or other equivalent actuator, which rod has its end opposite from the trip finger connected with the crank pin 27 of the rotating shaft 16. The push rod or actuator has a combined reciprocatory and rocking movement on a bearing pulley 28 journaled on a support 29 which is fastened by a bolt or equivalent means 30 to the arm 10 of the igniter frame, said bolt forming a pivot on which the member 29 can be adjusted to different positions for bringing the free end of the push rod 26 into proper co-operative relation with the trip finger 25. The trip finger has a tail piece or arm 31 which is adapted to be engaged by an arm 32 fastened to the outer end of the movable electrode 4, the arm 32 being held yieldingly against the arm 31 by a helical extension spring 33 which has one end connected with the arm 32 and the other end anchored at 34 on the igniter frame. To obtain the proper set of the sparking points of the electrodes with respect to the rotor of the generator, one arm, such as 32, has an adjustable screw 35 which engages the arm 31. The spring 33 is of less tension than the return springs 23 of the rotor and is sufficient to maintain the arms 31 and 32 in contact during the first part of the cocking movement of the armature and to maintain the electrodes in contact during the final part of such cocking movement, it being understood that the electrodes are normally separated, and that they come into contact before the rotor or armature finishes its cocking movement, or the position of the rotor shown by dotted lines in Figure 1. At the end of the cocking movement, the push rod 26 slips off the tip of the trip finger, and the springs 23, which have been extended or placed under tension during the cocking movement, quickly snap the rotor back to and beyond its normal position, as indicated by the dot and dash lines, Figure 1. This quick movement of the rotor quickly changes the path of the magnetic flux through the pole pieces and rotor, with the result that a high electromotive force is induced in the generating coils, the maximum electro-motive force occurring at about the time the electrodes are separated during the return movement of the arm 31 of the trip finger, such arm being adapted to strike the arm 32 a hammer blow for effecting a quick separation of electrodes.

By referring to Figure 4, the effect of a defective positioning of the igniter is clearly depicted. Without the use of the positioning controlling parts 10, 12 and 14, it is possible for the igniter to be secured in either the full line position *a* or dotted line position *b*, because of the latitude provided between the igniter body and the bolts and cylinder wall. In other words, the igniter can be fastened to one side or the other of its true central position to an extent corresponding to the angle *d*. Thus, the trip arm of the rotor 25 would be in the dotted line position *c* when the igniter is in the dotted line position *b*, and as a consequence the push rod 26 would not be long enough to operate the trip finger 25, and furthermore

the push rod supporting roller 28 would be raised to the dotted line position *e*, thereby raising the active end of the trip rod above the tip of the trip finger. When the igniter body is in the full line position *a*, the trip finger is shifted to the right and the supporting roller 28 is lowered so that the push rod and trip finger will obviously be improperly positioned. These contingencies can be guarded against by providing the arm 10 on the igniter body and having some means on the fixed part of the engine to engage such arm, such means being the lugs 14, as in Figure 1, or a bolt or pin 14* engaging in the slot 10* of the arm 10, as in Figure 9.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, is:—

1. The combination of an engine cylinder, a make
Insert A¹. and break igniter, \wedge an electric generator having its
A¹

movable element operatively connected with the movable element of the igniter, an actuator for the movable

Insert A². elements of the igniter and generator, \wedge and
A²

in addition to the said fastening means
means \wedge for insuring the correct positioning of the igniter with respect to the actuator when the former is replaced on the engine after
latter

P'r A. removal and for preventing shifting of the igniter, said \wedge
means comprising engaged parts on the engine cylinder and igniter.

2. The combination of an engine cylinder, an igniter, means for removably fastening the igniter on the cylinder, there being sufficient play between the parts to insure removal of the igniter while rendering the igniter liable to replacement in different positions, an actuator for the igniter requiring a predetermined position of the igniter with respect thereto, and means partly on the
engine

" " igniter and partly on the \wedge [generator]* for insuring such predetermined relative position of the actuator and
igniter.

3. The combination of an engine cylinder, an igniter and electric generator forming a unitary structure removably mounted on the cylinder, fastening means for the said unitary structure, said structure

[*Words and figures enclosed in brackets erased in copy.]

being liable to replacement in different positions on the cylinder, an actuator for the movable elements of the generator and igniter and operatively connected with the moving part of the engine, and in addition to the said fastening means

Pr A. means \wedge for insuring a predetermined relative position of the actuator and movable elements of the igniter and latter

generator, said \wedge means consisting of relatively fixed parts of the said structure and engine cylinder which inter-engage when the said structure is in proper position.

4. The combination of an engine cylinder having an opening, igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising a laterally-extending arm on the igniter, and a fixed part on the engine with which the arm is adapted to engage.

5. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising an arm on the igniter, a longitudinally adjustable member on the arm, and a part fixed on the engine with which the said member is adapted to removably engage.

6. The combination of an engine cylinder, a make and break igniter mounted thereon and liable to assume different positions within certain limits, an actuator for the movable element of the igniter, means for moving the actuator, a laterally-extending arm on the igniter, and means fixed on the engine with which the arm removably connected to insure such position of the igniter that the actuator and movable electrode will be in proper relation to each other, and means on the arm for supporting the actuator.

7. The combination of an engine cylinder, a make and break igniter removably mounted thereon and liable to assume different positions within certain limits, a generator carried by the igniter and removable therewith as a unitary structure, the movable elements of the igniter and generator being operatively connected, an actuator for the said movable elements, a moving part of the engine with which the actuator remains connected while the igniter and generator are engaged

Pr A. generator are removed, and \wedge [interlocking]* means between the said structure and engine cylinder for permitting the placing of the latter in only one position.

8. The combination of an engine cylinder having an opening, a make and break igniter secured in the opening and liable to assume different positions within certain limits, a generator mounted on the igniter and removable therewith, means for operatively connecting

*Words and figures enclosed in brackets erased in copy.]

the movable elements of the igniter and generator, a push rod, a trip finger connected with one of the movable elements and with the actuator is adapted to engage, and means arranged partly on the engine and partly on the igniter and generator structure whereby the push rod and trip finger will be in proper relation to each other each time the igniter and generator structure is replaced after removal from the cylinder.

9. The combination of an engine cylinder, an igniter mounted thereon, a generator mounted on the igniter, means for operatively connecting the movable elements of the generator and igniter together, a trip finger connected with the said movable elements, an operating shaft, a push rod adapted to engage the trip finger, means for reciprocating the rod by the shaft, and means whereby the igniter and generator structure can be fastened in only one position where the push rod and trip finger are in proper relation to each other, said means comprising a part on the igniter and generator structure and a part on the engine with which the first part is detachably engaged.

10. The combination of an engine, an igniter mounted on the cylinder thereof, a bracket extending from the igniter, a generator on the bracket, means for operatively connecting the movable elements of the generator and igniter together, a trip finger connected with the movable elements, a push rod adapted to wipe on the trip finger, means for actuating the push rod, and arm extending from the bracket, a support on the arm for the trip rod, and means fixedly engaging

Pr B. on the engine with which the arm [engaged] * whereby the igniter can be replaced on the engine cylinder in only that position in which the trip finger and push rod are in proper relation.

11. The combination of an engine cylinder, an arm extending laterally from the head thereof, a shaft bearing in the arm, a push rod, and a crank pin connection between the shaft and push rod, with an igniter mounted on the engine cylinder and having its movable electrode operatively related to the push rod, an arm extending from the igniter, and means on the arm of the engine cylinder with which the first-mentioned arm detachably engages for permitting the igniter to be attached in only that position where the push rod and movable electrode are in proper relation, and means on the first-mentioned arm for movably supporting the push rod.

12. The combination of an engine cylinder, an igniter and current generator structure removably mounted thereon, the movable elements of the igniter and generator being operatively connected, a trip finger connected with such movable elements, an arm extending from the igniter, means fixed with respect to the engine cylinder for engagement with the arm whereby the said structure can be fastened in only one position on the cylinder, an actuating push rod arranged to engage the trip finger, means for reciprocating the push

[*Words and figures enclosed in brackets erased in copy.]

rod, and an adjustable support mounted on the arm and on which the push rod moves.

13. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

14. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, one of the said arms having means for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

15. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a spring connected with the arm, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

16. The combination of an igniter frame, comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion motor, sparking electrodes mounted in said body, a magneto generator mounted in said base, means for actuating the said generator to generate current, means for actuating one of the electrodes, and means relatively fixed on said motor for engaging said laterally extending arm.

17. The combination of an igniter frame, comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion engine, sparking electrodes mounted in said body and adapted to make and break a circuit within the combustion chamber of the engine, a magneto generator mounted on said base, means for actuating the magneto generator to generate current, means for operating one of the electrodes cooperatively with said generator, a member extensibly mounted in said laterally extending arm, and means secured in relatively fixed relation on the engine to engage said extensible member.

Per A.

18. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion engine, sparking electrodes mounted in said body and adapted to make and break

[*Words and figures enclosed in brackets erased in copy.]

the sparking circuit within the combustion chamber of the engine, a magneto generator mounted on said base and arranged to be actuated by said engine to generate current, means for actuating one of the electrodes cooperatively with said generator for making and breaking said sparking circuit, and a member relatively fixed on the engine to engage said base for preventing angular shift of the said frame.

[Matter enclosed between rules erased in copy.]

18 [19].* In combination, a magneto generator comprising a field magnet, a pair of pole pieces, inductive windings, and a rotor mounted on a shaft, means for cocking said rotor, spring means for suddenly bringing said rotor back upon its release, an igniter frame comprising a body and a shelf extending therefrom and supporting said generator, a stationary insulated electrode and a movable electrode mounted in said body, said movable electrode adapted to make contact with the other said electrode, an arm on said movable electrode, an arm on said rotor shaft and adapted to cooperate with said arm on movable electrode to so oscillate the movable electrode as to make and break contact with said other electrode, a circuit connecting said windings to said electrodes, and an arm extending from said igniter frame and adapted to engage on a relatively fixed member on the engine associated with said frame.

In Testimony Whereof I affix my signature in presence of two witnesses,

Emil Podlesák, S. C. Deckner, Hal W.
Michaels,

OATH

STATE OF OHIO,

County of Seneca, ss:

Emil Podlesák, the above-named petitioner, being duly sworn, deposes and says that he is a citizen of the United States, and resident of Tiffin, in the County of Seneca, and State of Ohio, that he verily believes himself to be the original, first, and sole inventor of the improvements in Current generators and Igniters for Internal Combustion Engines, described and claimed in the annexed specification; that he does not know and does not believe that the same was ever known or used before his invention or discovery thereof, or patented or described in any printed publication in any country before his invention or discovery thereof, or more than two years prior to this application, or in public use or on sale in the United States for more than two years prior to this application; that said invention has not been patented in any country foreign to the United States on an application filed by him or his legal representatives or assigns more than twelve months prior to this application; and that no application for patent on said improvement has been filed by him or his repre-

[*Words and figures enclosed in brackets erased in copy.]

representatives or assigns in any country foreign to the United States,
[except as follows:]*

Emil Podlesák.

Sworn to and subscribed before me this 26th day of March, 1912.

Hal W. Michaels, Notary Public, Seneca
County Ohio. [Seal.]

Paper No. 2

July 5, 1912.

Emil Podlesák, c/o Chattin Bradway, Victor Bldg., Washington,
D. C.:

No. 690,921. Filed Apr. 15, 1912. Current Generators and
Igniters for Internal Combustion Engines

This case has been examined.

Applicant's statement, occurring in the specification, in regard to
the fitting of igniters to engine cylinders is queried. It is thought
that in a well constructed engine, the bolt holes of the igniter would
be fitted to the bolts well enough to prevent any error in the timing
of the igniter.

Claims 1, 3, 7, 8, 9, 10, 11, 12 and 18 are rejected upon Wattles,
90,935, May 2, 1911 (123-149).

It is thought that the stub bolts 32 of Wattles will insure a fit close
enough to correctly position the igniter when placed upon the engine
cylinder.

Claim 2 is held to be indefinite. It is not clear what is meant in
the last three lines of this claim by "means partly on the igniter and
partly on the generator."

Claim 7, in addition, is held to be indefinite, it not being clear
what element is covered by the term "interlocking means," occur-
ing in line 9 of this claim.

The remaining claims in the case are allowable, as at present ad-
vised.

Benson, Examiner. H. H. G.

[*Words and figures enclosed in brackets erased in copy.]

Application Room,
Nov. 8, 1912,
U. S. Patent Office.

U. S. Patent Office,
Nov. 9, 1912,
Division XXVIII.

3

In the United States Patent Office

Room 63

In re Application of Emil Podlesak. Current Generators and Igniters for Internal Combustion Engines. Serial No. 690,921. Filed April 15, 1912.

A

Honorable Commissioner of Patents.

SIR: In response to the Official communication, the above-entitled application is hereby amended as follows:

Claim 1, line 2, after the comma, insert

A'. "fastening means for securing the igniter in position on the cylinder."

Line 5, before "and" insert

A². —said igniter being removable from the cylinder while the actuator remains in place—.

Same line, after "means" insert —in addition to the said fastening means—. Line 9, before "means" insert —latter—.

Claim 2, line 8, change "generator" to —engine—.

Claim 3, line 8, after "means" insert —in addition to the said fastening means—. Line 10, before "means" insert —latter—.

Claim 7, line 9, change "interlocking" to —engaging—.

Cancel claim 18, and change the ordinal of claim 19 to 18.

Remarks

This amendment is made after a personal interview with the Principal Examiner of Division 28, and it is urged that early action be given to the case, as applicant desires to continue the prosecution to early allowance because of infringement of his invention by others.

With regard to the first paragraph of the Office letter, the best reply thereto is a quotation from applicant's letter regarding the rejection:

"True enough that engines can be so well and accurately constructed that the bolt or stud holes of igniters will so fit the studs as to very much reduce the error in timing of ignition,—said error due to possible shifting in position of the igniter body. However, very

few, comparatively, engines are now-a-days so built; moreover, the operators themselves are in the habit of enlarging the stud holes of igniters fitting close, so that these 'come off' and 'go on' easy, for cleaning, etc."

It will thus be seen that there is a problem to be overcome in igniters of that type which are bodily removable from the engine cylinder, while their actuator remains in place. Applicant has effectively solved this problem and his claims are directed to the means employed therefor.

Now, the reference cited has no particular bearing on applicant's invention, because the patent does not show an igniter which has an actuator or any mechanical means exterior thereto, much less an actuator which remains in position on the engine while the igniter is removed. In the Wattles patent, cited, the igniter is pneumatically actuated and the actuator is in the form of the piston 45 contained in the body of the igniter and operated by the compressed gas in the engine cylinder, the outward movement of the piston 45 operating the movable electrode 39. As the actuator or piston 45 is embodied in the igniter itself, it is removed with the latter as a unitary structure, and hence it makes no difference in what position the igniter is replaced in the engine cylinder when once removed. It is impossible for the operative relation of the piston and movable electrode to be disturbed, but this is not so with applicant's arrangement where the actuator is entirely separate from the igniter and remains in situ while the igniter is removed from the cylinder.

At the interview the Wattles patent was recognized as being insufficient to anticipate the claims, but that claim 1 in its original wording should be amended in certain respects to bring out more clearly the fact that applicant's igniter positioning means is something in addition to the usual bolts or fastening means that secure the igniter in the engine cylinder. Claims 1 and 3 have been amended along this line and are thought to be allowable. The remaining rejected claims, with the exception of claim 18, which has been canceled, are more or less specific to the means for properly positioning the igniter in the cylinder and are clearly allowable over the Wattles patent, for the reasons pointed out at the interview, and for the reasons set forth above.

Favorable and early action is solicited.

Respectfully submitted,

Emil Podlesak, By C. Bradway, Att'y.
Washington, D. C., Nov. 7, 1912.

#4

B

Feb. 18, 1913.

The following changes are made in—

Application Serial No. 690,921 of Emil Podlesak.

Cl. 10 line 9 change "engaged" to "engages"

A. R. Benson, Examiner, Division 28.

E. PODLEŠÁK.

CURRENT GENERATOR AND IGNITER FOR INTERNAL COMBUSTION ENGINES.

APPLICATION FILED APR. 15, 1912.

1,055,076.

Patented Mar. 4, 1913.

3 SHEETS-SHEET 1.

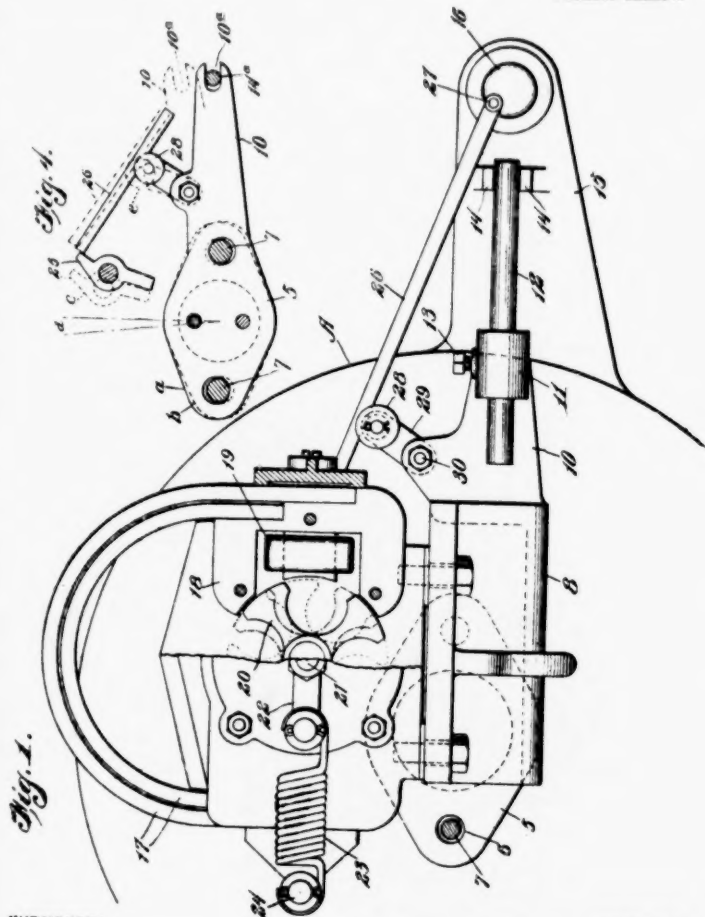


Fig. 1.

Fig. 4.

WITNESSES

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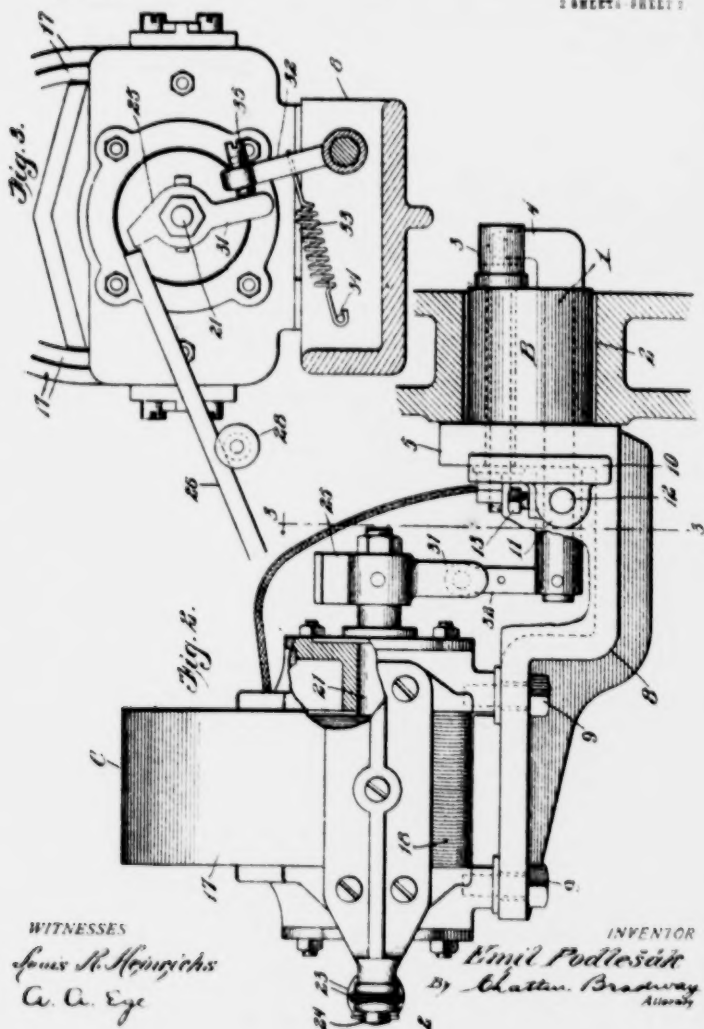
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2 SHEETS-SHEET 2



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CURRENT-GENERATOR AND IGNITER FOR INTERNAL-COMBUSTION ENGINES.

1,055,076.

Specification of Letters Patent.

Patented Mar. 4, 1913.

Application filed April 15, 1912. Serial No. 690,921.

REISSUED*To all whom it may concern:*

Be it known that I, EMIL PODLESÁK, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful improvements in Current-Generators and Igniters for Internal-Combustion Engines, of which the following is a specification.

This invention relates to igniters of the make and break type and in which the magneto or current generator is combined therewith as a unitary structure that is fastened to the head or other suitable part of the engine cylinder, the rotor of the generator being operatively connected with the movable electrode of the igniter so that a reciprocatory actuator, push rod or equivalent means operating on the rotor trip finger against the tension of spring means causes the rotor to move to "cocked" position while the electrodes of the igniter are brought together, and then released from such "cocked" position so that the electro-motive force generated by the sudden return movement of the rotor through the magnetic field of the generator will produce the igniting current whereby the spark is produced between the electrodes in the compression chamber of the engine. The combination of means and instrumentalities above referred to is the subject-matter of my pending application for Letters-Patent of the United States, Serial No. 668,153, filed December 27, 1911, and the present invention relates to improvements especially adapted for combined igniters and generators of the type referred to.

The actuating means for the rotor and movable electrode is mounted on the engine cylinder or other suitable part and is operatively connected with some moving mechanism and has no connection with the magneto or igniter, since the actuator, which may be a push rod, rotating or oscillatory arm or the like, merely contacts with the trip finger of the rotor. As the igniter and generator must be removed from time to time for cleaning the electrodes and other reasons, it is of great importance that the igniter and generator be replaced in exactly the same position it was before removal; otherwise, the push rod will not be disposed in proper relation to the trip finger of the rotor to accomplish satisfactory results in the operation of the engine, generator and igniter. The reason for this liability of the igniter being replaced in a different position

from that which it originally occupied when all the operating parts were adjusted to accomplish the best results, is due to the fact that the holes in the body of the igniter for receiving the bolts or fastening studs are made larger than the bolts or studs, as is also the opening in the engine cylinder for receiving the body of the igniter, this "latitude" between the parts being provided so as to facilitate easy removal of the igniter and to obviate the necessity of careful and expensive machining and fitting of the parts. By reason of the liability to error in replacing the igniter, there is provided an arm or equivalent means on the igniter body to inter-engage with a fixed part on the engine cylinder, so that there can be but one position in which the igniter can be attached to the cylinder, and that position is the one where the push rod or other actuator is in proper relation to the trip finger of the rotor. As the result of this arrangement, it is never necessary to adjust the relation of the various instrumentalities in replacing the igniter when it has been removed for cleaning or any other purpose.

In addition to the foregoing objects and advantages, the invention has certain other minor advantages which will appear hereinafter as the description proceeds, in reference to the accompanying drawings, in which,

Figure 1 is a front view of the combined igniter and current generator applied to the head of an engine cylinder, part of the generator being shown in section. Fig. 2 is a front view thereof showing a portion of the cylinder head in section. Fig. 3 is a sectional view on line 3-3, Fig. 2. Fig. 4 is a diagrammatic view to show the results of a defective positioning of the igniter with respect to the operating push rod.

Similar reference characters are employed to designate corresponding parts throughout the views.

Referring to the drawings, A designates the head or other wall of a cylinder of an internal combustion engine; B, the make and break igniter; and C, the magneto current generator of the inductor type.

The igniter B comprises a cylindrical body 1 which passes through an opening 2 in the cylinder head A, the opening being of slightly larger diameter than the diameter of the igniter body, so that the latter can be easily inserted or removed. Passing through the igniter body is a fixed elec-

trode 3 with which cooperates a movable or rocking electrode 4. The outer end of the igniter body is formed with a rhomboidal plate 5, which, as shown in Fig. 1, has bolt-receiving openings 6 that are slightly larger in diameter than the fastening bolts or studs 7 that pass through the openings and are fastened to the cylinder head A. Thus, there is considerable latitude allowed between the body of the igniter, on the one hand and the cylinder head and fastening bolts on the other, and by reason of this, the igniter body is liable to be fastened to the cylinder head in a variety of positions within the limit of this latitude, the disadvantages of which have been hereinbefore pointed out, but are overcome by the improvements later to be set forth.

Extending from the plate portion 5 of the igniter body is a shelf or bracket 8 which forms a base to which the generator C is removably secured by stud bolts 9. Projecting laterally from the bracket or shelf 8 is an arm 10 which is formed at its outer extremity with a boss or enlargement 11 that has a passage through which extends an extension rod 12, the rod being fastened in any desired position by a set screw 13 or equivalent means. The outer extremity of this extension rod is located at a considerable distance from the axis of the igniter, and this extremity is adapted to engage some fixed part of the engine, such for instance as lugs 14 on the arm 15 in which the operating shaft 16 rotates. The lugs 14 are spaced apart far enough for the extension rod to enter between them as the igniter body is inserted in the opening in the engine cylinder, and when thus positioned, it is impossible for the igniter body to shift angularly or around its axis and thereby disturb the proper relation of the igniter and generator operating means. The parts 10, 12 and 14 thus constitute means for insuring the proper positioning of the igniter and the design of the parts is such that no special care or adjustment is required in taking off or replacing the igniter.

The generator C is fully set forth in the pending application hereinbefore referred to, so that only a brief description here is deemed necessary. The generator comprises permanent horseshoe magnets 17 fastened to E-shaped pole pieces 18, on the middle projections of which are generating coils 19. In the present drawings, only one pole piece and coil is shown in Fig. 1, the other corresponding parts being concealed from view. Between the pole pieces oscillates a cruciform rotor 20 mounted on a shaft 21 which has at one end oppositely-disposed crank arms 22 which are connected with springs 23 that assume an alining position through the axis of the rotor when the latter is idle, the outer ends of the springs being

fastened to studs 24 on the generator frame. On the opposite end of the rotor shaft is a trip finger 25 which is adapted to have a wiping engagement with a push rod 26 or other equivalent actuator, which rod has its end opposite from the trip finger connected with the crank pin 27 of the rotating shaft 16. The push rod or actuator has a combined reciprocatory and rocking movement on a bearing pulley 28 journaled on a support 29 which is fastened by a bolt or equivalent means 30 to the arm 10 of the igniter frame, said bolt forming a pivot on which the member 29 can be adjusted to different positions for bringing the free end of the push rod 26 into proper cooperative relation with the trip finger 25. The trip finger has a tail piece or arm 31 which is adapted to be engaged by an arm 32 fastened to the outer end of the movable electrode 4, the arm 32 being held yieldingly against the arm 31 by a helical extension spring 33 which has one end connected with the arm 32 and the other end anchored at 34 on the igniter frame. To obtain the proper set of the sparking points of the electrodes with respect to the rotor of the generator, one arm, such as 32, has an adjustable screw 35 which engages the arm 31. The spring 33 is of less tension than the return springs 23 of the rotor and is sufficient to maintain the arms 31 and 32 in contact during the first part of the cocking movement of the armature and to maintain the electrodes in contact during the final part of such cocking movement, it being understood that the electrodes are normally separated, and that they come into contact before the rotor or armature finishes its cocking movement, or the position of the rotor shown by dotted lines in Fig. 1. At the end of the cocking movement, the push rod 26 slips off the tip of the trip finger, and the springs 23, which have been extended or placed under tension during the cocking movement, quickly snap the rotor back to and beyond its normal position, as indicated by the dot and dash lines, Fig. 1. This quick movement of the rotor quickly changes the path of the magnetic flux through the pole pieces and rotor, with the result that a high electro-motive force is induced in the generating coils, the maximum electro-motive force occurring at about the time the electrodes are separated during the return movement of the arm 31 of the trip finger, such arm being adapted to strike the arm 32 a hammer blow for effecting a quick separation of electrodes.

By referring to Fig. 4, the effect of a defective positioning of the igniter is clearly depicted. Without the use of the positioning controlling parts 10, 12 and 14, it is possible for the igniter to be secured in either the full line position a or dotted line

position *b*, because of the latitude provided between the igniter body and the bolts and cylinder wall. In other words, the igniter can be fastened to one side or the other of its true central position to an extent corresponding to the angle *d*. Thus, the trip arm of the rotor 25 would be in the dotted line position *c* when the igniter is in the dotted line position *b*, and as a consequence the push rod 26 would not be long enough to operate the trip finger 25, and furthermore the push rod supporting roller 28 would be raised to the dotted line position *e*, thereby raising the active end of the trip rod above the tip of the trip finger. When the igniter body is in the full line position *a*, the trip finger is shifted to the right and the supporting roller 28 is lowered so that the push rod and trip finger will obviously be improperly positioned. These contingencies can be guarded against by providing the arm 10 on the igniter body and having some means on the fixed part of the engine to engage such arm, such means being the lugs 14, as in Fig. 1, or a bolt or pin 14' engaging in the slot 10' of the arm 10, as in Fig. 9.

From the foregoing description, taken in connection with the accompanying drawings, the advantages of the construction and of the method of operation will be readily apparent to those skilled in the art to which the invention appertains, and while I have described the principle of operation of the invention, together with the apparatus which I now consider to be the best embodiment thereof, I desire to have it understood that the apparatus shown is merely illustrative, and that such changes may be made when desired as are within the scope of the claims appended hereto.

Having thus described the invention, what I claim as new, is:—

1. The combination of an engine cylinder, a make and break igniter, fastening means for securing the igniter in position on the cylinder, an electric generator having its movable element operatively connected with the movable element of the igniter, an actuator for the movable elements of the igniter and generator, said igniter being removable from the cylinder while the actuator remains in place, and means in addition to the said fastening means for insuring the correct positioning of the igniter with respect to the actuator when the former is replaced on the engine after removal and for preventing shifting of the igniter, said latter means comprising engaged parts on the engine cylinder and igniter.

2. The combination of an engine cylinder, an igniter, means for removably fastening the igniter on the cylinder, there being sufficient play between the parts to insure removal of the igniter while rendering the igniter liable to replacement in different

positions, an actuator for the igniter requiring a predetermined position of the igniter with respect thereto, and means partly on the igniter and partly on the engine for insuring such predetermined relative position of the actuator and igniter.

3. The combination of an engine cylinder, an igniter and electric generator forming a unitary structure removably mounted on the cylinder, fastening means for the said unitary structure, said structure being liable to replacement in different positions on the cylinder, an actuator for the movable elements of the generator and igniter and operatively connected with the moving part of the engine, and means in addition to the said fastening means for insuring a predetermined relative position of the actuator and movable elements of the igniter and generator, said latter means consisting of relatively fixed parts of the said structure and engine cylinder which inter-engage when the said structure is in proper position.

4. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising a laterally-extending arm on the igniter, and a fixed part on the engine with which the arm is adapted to engage.

5. The combination of an engine cylinder having an opening, an igniter disposed in the opening and liable to be fastened in different positions therein, an actuator for the movable electrode of the igniter, and means for insuring the proper positioning of the igniter with respect to the actuator, said means comprising an arm on the igniter, a longitudinally adjustable member on the arm, and a part fixed on the engine with which the said member is adapted to releasably engage.

6. The combination of an engine cylinder, a make and break igniter mounted thereon and liable to assume different positions within certain limits, an actuator for the movable element of the igniter, means for moving the actuator, a laterally-extending arm on the igniter, and means fixed on the engine with which the arm is removably connected to insure such position of the igniter that the actuator and movable electrode will be in proper relation to each other, and means on the arm for supporting the actuator.

7. The combination of an engine cylinder, a make and break igniter removably mounted thereon and liable to assume different positions within certain limits, a generator carried by the igniter and removable therewith as a unitary structure, the movable

elements of the igniter and generator being operatively connected, an actuator for the said movable elements, a moving part of the engine with which the actuator remains connected while the igniter and generator are removed, and engaging means between the said structure and engine cylinder for permitting the placing of the latter in only one position.

8. The combination of an engine cylinder having an opening, a make and break igniter secured in the opening and liable to assume different positions within certain limits, a generator mounted on the igniter and removable therewith, means for operatively connecting the movable elements of the igniter and generator, a push rod, a trip finger connected with one of the movable elements and with which the actuator is adapted to engage, and means arranged partly on the engine and partly on the igniter and generator structure whereby the push rod and trip finger will be in proper relation to each other each time the igniter and generator structure is replaced after removal from the cylinder.

9. The combination of an engine cylinder, an igniter mounted thereon, a generator mounted on the igniter, means for operatively connecting the movable elements of the generator and igniter to move together, a trip finger connected with the said movable elements, an operating shaft, a push rod adapted to engage the trip finger, means for reciprocating the rod by the shaft, and means whereby the igniter and generator structure can be fastened in only one position where the push rod and trip finger are in proper relation to each other, said means comprising a part on the igniter and generator structure and a part on the engine with which the first part is detachably engaged.

10. The combination of an engine, an igniter mounted on the cylinder thereof, a bracket extending from the igniter, a generator on the bracket, means for operatively connecting the movable elements of the generator and igniter together, a trip finger connected with the movable elements, a push rod adapted to wipe on the trip finger, means for actuating the push rod, an arm extending from the bracket, a support on the arm for the trip rod, and means fixed on the engine with which the arm engages whereby the igniter can be replaced on the engine cylinder in only that position in which the trip finger and push rod are in proper relation.

11. The combination of an engine cylinder, an arm extending laterally from the head thereof, a shaft bearing in the arm, a push rod, and a crank pin connection between the shaft and push rod, with an igniter mounted on the engine cylinder and

having its movable electrode operatively related to the push rod, an arm extending from the igniter, and means on the arm of the engine cylinder with which the first-mentioned arm detachably engages for permitting the igniter to be attached in only that position where the push rod and movable electrode are in proper relation, and means on the first-mentioned arm for movably supporting the push rod.

12. The combination of an engine cylinder, an igniter and current generator structure removably mounted thereon, the movable elements of the igniter and generator being operatively connected, a trip finger connected with such movable elements, an arm extending from the igniter, means fixed with respect to the engine cylinder for engagement with the arm whereby the said structure can be fastened in only one position on the cylinder, an actuating push rod arranged to engage the trip finger, means for reciprocating the push rod, and an adjustable support mounted on the arm and on which the push rod moves.

13. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

14. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, one of the said arms having means for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

15. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a spring connected with the arm, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

16. The combination of an igniter frame, comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion motor, sparking elec-

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trodes mounted in said body, a magneto generator mounted in said base, means for actuating the said generator to generate current, means for actuating one of the electrodes, and means relatively fixed on said motor for engaging said laterally extending arm.

17. The combination of an igniter frame, comprising a body, a supporting base, and an arm extending laterally therefrom, with an internal combustion engine, sparking electrodes mounted in said body and adapted to make and break a circuit within the combustion chamber of the engine, a magneto generator mounted on said base, means for actuating the magneto generator to generate current, means for operating one of the electrodes coöperatively with said generator, a member extensibly mounted in said laterally extending arm, and means secured in relatively fixed relation on the engine to engage said extensible member.

18. In combination, a magneto generator comprising a field magnet, a pair of pole pieces, inductive windings, and a rotor

mounted on a shaft, means for cocking said rotor, spring means for suddenly bringing said rotor back upon its release, an igniter frame comprising a body and a shelf extending therefrom and supporting said generator, a stationary insulated electrode and a movable electrode mounted in said body, said movable electrode adapted to make contact with the other said electrode, an arm on said movable electrode, an arm on said rotor shaft and adapted to coöperate with said arm on movable electrode to so oscillate the movable electrode as to make and break contact with said other electrode, a circuit connecting said windings to said electrodes, and an arm extending from said igniter frame and adapted to engage on a relatively fixed member on the engine associated with said frame.

In testimony whereof I affix my signature in presence of two witnesses.

EMIL PODLEŠÁK.

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ELECTRIC IGNITER FOR EXPLOSIVE ENGINES

APPLICATION FILED FEB. 16, 1903.

2 SHEETS-SHEET 1

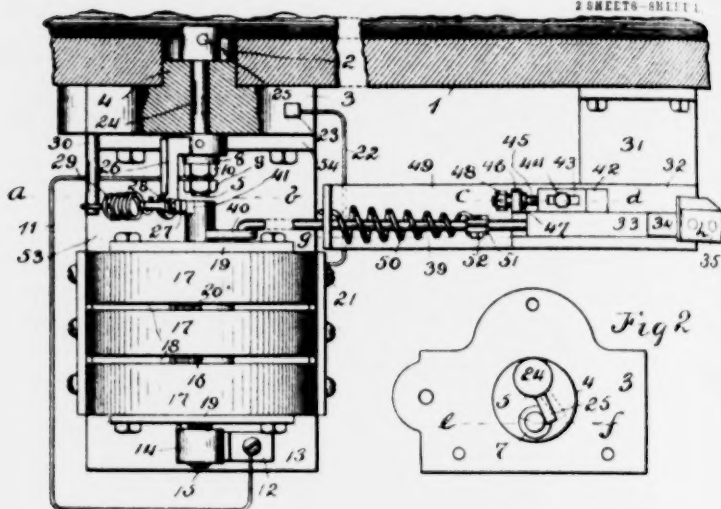


Fig 1

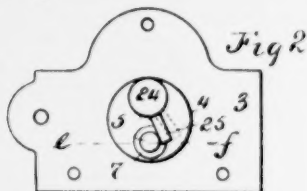


Fig 2

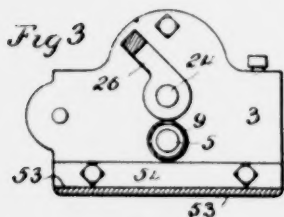


Fig 3

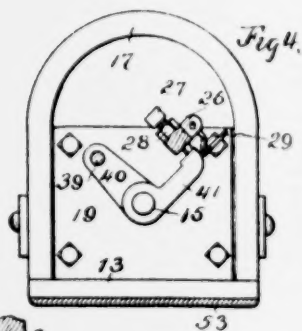


Fig 4.

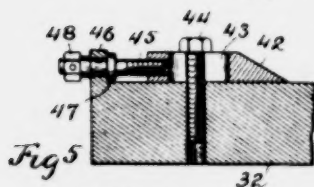


Fig 5

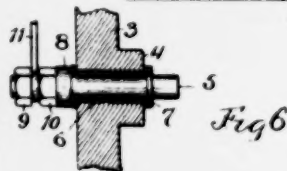


Fig 6

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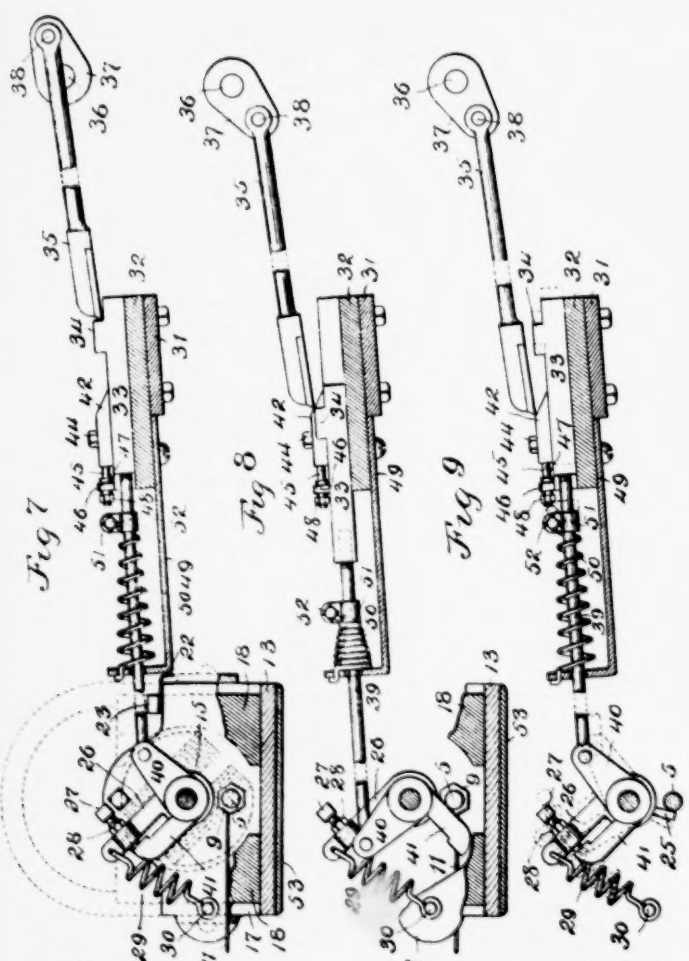
No. 820,535.

PATENTED MAY 15, 1906.

G. J. WEBER.
ELECTRIC IGNITER FOR EXPLOSIVE ENGINES.

APPLICATION FILED FEB. 16, 1903.

2 SHEETS-SHEET 2.



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ELECTRIC IGNITER FOR EXPLOSIVE-ENGINES.

No. 820,535.

Specification of Letters Patent.

Patented May 18, 1906.

Application filed February 16, 1903. Serial No. 143,661.

To all whom it may concern:

Be it known that I, GEORGE J. WEBER, a citizen of the United States of America, residing in Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Improvement in Electric Igniters for Explosive-Engines, of which the following is a specification, reference being had therein to the accompanying drawings, forming a part thereof.

My invention relates to improvements in electric igniters for explosive-engines.

The object of my invention is to provide an electric-igniter mechanism with novel means for producing the spark for firing the charge.

My invention provides, further, certain adjusting means by which the time of producing the spark may be accurately predetermined.

My invention provides, further, timing means adjustable while the engine is running, thus permitting the ignition of the charge at the proper time for obtaining the greatest efficiency from the explosion of the charge.

Other novel features are hereinafter fully described and claimed.

In the accompanying drawings, which illustrate my invention, Figure 1 represents a plan view of the igniting mechanism, some of the parts being broken away and others shown in horizontal section. Fig. 2 is an inside elevation view of the block in which are mounted the two electrodes. Fig. 3 is a vertical sectional view taken on the dotted line *a b* of Fig. 1 looking toward the engine-cylinder. Fig. 4 is a similar view taken on the same dotted line, but looking in the opposite direction. Fig. 5 is a vertical sectional view of the adjustable timing mechanism, taken on the dotted line *c d* of Fig. 1. Fig. 6 is a horizontal sectional view taken on the dotted line *e f* of Fig. 2, showing the stationary electrode and some of the parts connected therewith. Fig. 7 is a view, partially in vertical section and partially in elevation, of the igniting mechanism, the slide and armature-shaft being shown in the retracted position with the reciprocating actuating-arm about to engage and force forward the reciprocating slide. In this view a portion of the magnetic field and parts connected therewith are shown in vertical section, the remainder of the field and the armature being shown in dotted lines. The slide and slide-support in this view are

shown partly in elevation and partly in vertical section, the vertical section being taken on the dotted line *g h* of Fig. 1. Fig. 8 is a view similar to that shown in Fig. 7, the armature and portions of the magnetic field being omitted and the slide and parts connected therewith being shown in the positions occupied by them when the timing mechanism has very nearly disengaged the actuating-arm from the slide, the said actuating-arm having moved the slide forward. Fig. 9 represents a view similar to that shown in Fig. 8, the magnetic field and parts connected therewith being omitted and the slide and parts connected therewith being shown in the positions occupied by them after the timing mechanism has released the slide from engagement with the reciprocating actuating-arm. In this figure the furthest retracted positions of the slide and parts connected therewith are shown in dotted lines. The positions occupied by the movable electrode and the crank-arm connected thereto when the electrodes have been separated are also shown in dotted lines.

Similar characters of reference indicate similar parts.

1 indicates the engine-cylinder having a side opening 2. An igniter-block 3 is fitted to the outer side of the cylinder and is provided with an inner extension 4, fitted in the opening 2. In a horizontal opening through the block 3 extends a stationary electrode 5, insulated by a sleeve 6 of insulating material from the block 3. The ends of the sleeve 6 are provided with peripheral flanges. Against the flange at the inner end rests the rear side of a flange 7, provided on the inner end of the electrode 5, which is located in the opening 2 of the cylinder. Outside the block 3 on the electrode 5 is mounted a washer 8, which rests against the outer flange upon the sleeve 6. The outer end of the electrode 5 is screw-threaded and has mounted thereon two nuts 9 and 10, the inner one, 10, resting against the washer 8. Between the nuts 9 and 10 is clamped a wire 11, which is also secured to a commutator-brush 12, one end of which is secured to a horizontal non-magnetic plate or board 13. The other end of the commutator-brush bears upon a sleeve 14, rotatable with but insulated from the armature-shaft 15, on which is mounted the armature 16. The magneto machine may be of the ordinary Siemens magneto-electric type having horse-shoe-shaped permanent magnets 17, to which

are attached soft-iron pole-pieces 18. At the ends of the pole-pieces 18 are secured the two vertical shaft-bearing plates 19, in which the horizontal shaft 15 is rotatably mounted.

The armature may be wound in the manner common to this type. One end of the winding (indicated by 20) is connected to the insulated sleeve 14 and the other end connected to the armature-shaft, the circuit being completed to the block 3 through the bearings 19, one of the pole-pieces 18, screw 21, mounted in a screw-threaded hole in the pole-piece, thence by a wire 22, one end of which is secured to said screw 21, the other end being secured to the screw 23, mounted in a screw-threaded hole in the upper side of the block 3. Parallel with and above the electrode 5 is mounted in a horizontal hole extending through the block 3 the rock-shaft 24, in the inner end of which is secured radially an electrode 25, adapted to bear upon the inner end of the electrode 5. Upon the outer end of the rock-shaft 24 and rotatable therewith is a crank-arm 26, upon the outer end of which in a screw-threaded opening provided therefor is mounted an adjusting-screw 27, which extends transversely through the crank-arm and has mounted thereon a lock-nut 28, adapted to bear against the said crank-arm. To the crank-arm 26 is secured one end of a coil-spring 29, the other end of which is secured to a pin 30, extending horizontally rearwardly from the block 3.

The rock-shaft 15, together with the armature 16, is oscillated to and fro by the following mechanism. A horizontal bracket 31 to the right of the igniter-block 3, as viewed in Fig. 1, is secured at its inner end to the outside of the cylinder 1 and has mounted upon its upper side a slide guide or support 32, the upper side of which is provided with a groove disposed at right angles to the armature-shaft 15. In said groove is reciprocatively mounted a slide 33, provided on its upper side with a projection 34, adapted to be engaged by the free end of a reciprocating arm 35, the opposite end of which is connected with mechanism controlled by the running of the engine and designed to reciprocate the said arm 35.

In Figs. 7, 8, and 9 I have shown a mechanism adapted for this purpose, in which 36 indicates the rotatable crank-shaft of the engine. Upon said crank-shaft is mounted and rotatable therewith a crank-arm 37, having a crank-pin 38, pivotally fitted in a transverse hole provided in the arm 35. As the crank-shaft 36 is rotated the arm 35 will be reciprocated by means of the crank-arm 37 and pin 38. To the left end of the slide 33, as viewed in Figs. 1, 7, 8, and 9, is secured in a screw-threaded opening provided in said slide the screw-threaded end of a rod 39, the other end of which is pivotally connected to a crank-arm 40, rigidly secured upon the in-

ner end of the armature-shaft 15. A hammer-arm 41 is also secured upon the said armature-shaft. The outer end of the said hammer-arm 41 is so disposed that when the armature-shaft is retracted in the proper direction it will come in contact with the adjusting-screw 27 in the crank-arm 26 and move the said crank-arm 26 in a direction such that the electrodes 5 and 25 will be separated from each other, as shown in dotted lines in Figs. 2 and 9. Upon the upper side of the slide-support 32 is secured the timing device, by which the arm 35 is disengaged from the projection 34 of the slide 33. Various means may be employed for causing such disengagement.

In the form illustrated in the drawings I have provided a plate 42, disposed parallel with and at one side of the slide 33. The right end of the said plate 42, as viewed in Figs. 1, 7, 8, and 9, is inclined upwardly to the left, said inclined portion being at its upper end in a higher plane than the upper surface of the projection 34. The free end of the reciprocating arm 35 is so disposed as to come in contact with the inclined portion of the plate 42 and by the said plate made to rise and clear the projection 34 at the proper time when disengagement of the arm 35 from the projection 34 is desired. In order that such disengagement may be made to occur at any desired time, I have designed means by which the plate 42 may be adjusted lengthwise. For this purpose the plate 42 is provided with a vertical longitudinal slot 43, in which is mounted a vertical guide-screw 44, the lower end of which is fitted to a vertical screw-threaded hole provided in the slide-support 32. The left end of the plate 42, as viewed in Figs. 1 and 5, is provided with a longitudinal screw-threaded hole, in which is fitted the right screw-threaded end of an adjusting-screw 45, which is rotatively mounted in a transverse hole provided in a vertical projection 46 on the upper side of the slide-support 32. The said adjusting-screw 45 is provided at the right of the projection 46 with a peripheral flange 47 for preventing lengthwise movement of the said screw in one direction. Movement in the opposite direction is prevented by means of a collar 48, rigidly secured upon the said adjusting-screw and bearing upon the left side of the projection 46. By turning the said adjusting-screw 45 in the proper direction the plate 42 may be adjusted longitudinally to the proper position, after which the guide-screw 44 is turned so as to cause the head thereof to bear tightly upon the upper side of the plate 42, thus insuring the permanent disposition of the plate 42 in the place desired.

Secured to the left end of the slide-support 32, as viewed in Figs. 1, 7, 8, and 9, is a slightly-inclined plate 49, the left end of which is bent upwardly at right angles and is

provided in such bent portion with a transverse hole through which the rod 39 may be reciprocated. Encircling the rod 39 is a coil-spring 50, one end of which is secured to the bent portion of the plate 49, the other end being secured to a longitudinally-adjustable split sleeve 51, mounted on the rod 39 and adapted to be rigidly secured thereto after it has been properly adjusted by means of a transverse screw 52, rotatively mounted in oppositely-disposed holes in the split portion of the said sleeve 51. In one of said holes the said screw 52 has no screw-thread engagement; but the other of said holes is screw-threaded and fitted to the said screw. By turning the said screw 52 in the proper direction the sleeve 51 may be loosened upon the rod 39, adjusted longitudinally thereon to the proper position, and then rigidly secured in position by tightening the screw 52.

The tension of the spring 50 is such that after the spring has been compressed, as shown in Fig. 8, and then permitted to become extended, as shown in Fig. 9, through disengagement of the arm 35 from the projection 34 the said spring 50 will force the slide 33 and rod 39 to the right, thus oscillating the armature-shaft 15 in a direction such that the hammer-arm 41 will come in contact forcibly with the end of the adjusting-screw 27. The inertia of the slide 33, together with the force of the spring 50, will force the parts into the position shown in dotted lines in Fig. 9—that is, the hammer-arm 41 will force the crank-arm 26 to move in a direction such that the electrodes 5 and 25 will become separated. After the inertia of the slide 33 has been overcome the spring 29 and the spring 50 will cause a retraction of the parts into the position shown in solid lines in Fig. 9, in which position the electrodes 5 and 25 will again come in contact, thus completing the electric circuit.

In operating my invention, the parts having been assembled as described and the parts adjusted so that the electrodes 5 and 25 will be separated at approximately the proper time, the engine is started. As the engine crank-shaft 36 is rotated the slide 33 will be moved to the left, as viewed in Figs. 1, 7, 8, and 9, by the mechanism already described to the position shown in Fig. 8. In this position the armature-shaft will be oscillated in a direction such that the hammer-arm 41 will be as shown in Fig. 8. In the meantime the free end of the arm 35 will have been raised by the inclined portion of the plate 42, so as to nearly clear the projection 34. Continued movement forward of the arm 35 will cause it to be cleared from the projection 34, and the slide 33 will then be retracted by the spring 50 to the positions shown in Fig. 9, thus causing the hammer-arm 41 to strike the screw 27 and force the electrodes 5 and 25 apart, as already described. While the ar-

mature-shaft 15, slide 33, and parts connected therewith are being retracted from the positions shown in Fig. 8 to those shown in Fig. 9, the armature 16, carried by the shaft 15, will be oscillated so as to pass from one pole-piece 18 toward the opposite pole-piece. This movement of the armature will cause a current to be generated in the armature-winding 20, the said current passing in one direction or the other in the circuit in which the armature-winding is located, the direction depending upon the polarity of the pole-pieces and the manner of winding the wire on the armature. If the current passes first from the winding 20 to the commutator 14, it will pass from thence to the wire 11 by means of the brush 12, thence through the electrodes 5 and 25 to the igniter-block 3, thence by the screw 23, wire 22, screw 21, pole-piece 18 to bearings 19, thence by armature-shaft 15 to the end of the armature-winding which is secured to the said shaft. The crank-arms 26 and 41 are so adjusted upon their respective shafts that the screw 27 will be struck by the crank hammer-arm 41 at a time when the current generated in the circuit will be near its maximum strength. The hammer-arm 41 striking the anvil mechanism, consisting of the screw 27 and the crank-arm 26, will cause the electrode rock-shaft 24 to oscillate, so as to separate the electrodes 5 and 25 at the time when the strength of the electric current in the circuit is at its maximum strength. The timing mechanism, of which the plate 42 forms a part, will be so adjusted that when the spark occurs, due to the separation of the electrodes 5 and 25, the charge in the cylinder 1 will be very near its maximum compression. The time of separating the electrodes may be further regulated by adjusting the sleeve 51 longitudinally on the rod 39. The more compression given the spring 50 by moving the sleeve 51 in the proper direction the quicker the electrodes will be separated, as the spring 29 will be sooner overcome and permit a movement of the crank-arm 26. By adjusting the screw 27 the time for separating the electrodes may also be varied. After the engine has begun to run at its regular speed the adjustment of the time for producing the spark between the electrodes 5 and 25 may be obtained with great exactness, so that the charge may be fired at the exact time required for the greatest efficiency. To make this adjustment while the engine is running, the clamping-screw 44 is slightly loosened and the screw 45 turned in a direction such that the plate 42 will be moved to the right or left, as it may be desired, in order to disengage the arm 35 from the projection 34 sooner or later. It will be understood that if the engine is to be run at a rapid speed it is necessary to fire the charge sooner than when the engine is running at a slower speed. So when it is desired to increase the speed of

the engine to secure the greatest efficiency from the expansive force of the charge in the cylinder it becomes necessary to fire the charge earlier. This may be done, as described, while the engine is running by turning the screw 45 in the proper direction to advance the plate 42 toward the arm 35, after which the screw 44 is tightened to preserve the adjustment obtained.

Any one versed in the art will understand the great advantage of being able to adjust the time of firing the charge while the engine is running at its regular working speed, as at this time the operator can exactly determine the proper time for producing the firing-spark.

In order that the crank-arm 26 and the hammer-arm 41 may hold their relative positions with respect to each other intact, I prefer to mount the plate or board 13 upon a horizontal bracket 53, the inner end of which is provided with a vertical flange 54, secured rigidly to the igniter-block 3. The igniter-block 3, which is such as are commonly used in engines of this type, may be sent, together with the magneto-electric machine and some of the parts connected therewith, and fitted to an engine in lieu of a similar igniter-block provided with another sparking mechanism. The bracket 31, together with the parts mounted thereon, may also be sent from the factory ready to mount on an engine already set up. In such cases it is but necessary to connect the rod 39 to the crank-arm 10 after the brackets 53 and 31 are secured in place.

The rod 39 being quite long and slender, lack of sufficient space on the sheet preventing its full length being shown, the end connected with the crank-arm 40 can yield the amount required to follow the arc described by the said crank-arm in oscillating to and fro.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating slide, means controlled by the running of the engine for moving the slide in one direction, means for moving the slide in the opposite direction, means for oscillating the armature by means of the slide, means for separating the electrodes when the slide is moved in said opposite direction, and means for timing the movement of the said slide in said opposite direction.

2. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes, of means for

normally holding the said electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating slide, means controlled by the running of the engine for moving the slide in one direction, a spring for retracting the slide, means for oscillating the armature by means of the slide, adjustable timing means for determining the time of retracting the slide, and means for separating the electrodes when the slide is retracted.

3. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes, one of which is movable, of means for normally holding the said electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating slide, means controlled by the running of the engine for moving the slide in one direction, a spring for retracting the slide, means for oscillating the armature by means of the slide, timing means adjustable independently of the running of the engine for determining the time of retracting the slide, and adjustable means for separating the electrodes when the slide is retracted.

4. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes one of which is movable relative to the other, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillatory armature located in said field and included in said circuit, a reciprocating slide, means by which the armature is oscillated by means of the slide, means controlled by the running of the engine for moving the slide in one direction, means for retracting the slide in the opposite direction and two arms, one oscillatory with the armature and the other mounted on the movable electrode the said two arms being so disposed that the arm carried by the armature will strike the electrode-arm and cause a separation of the electrodes when the slide is retracted.

5. In igniters for explosive-engines, the combination with an oscillatory armature-shaft, of a hammer-arm oscillatory therewith, a reciprocating slide, means controlled by the running of the engine for moving the slide in one direction, spring-actuated mechanism for retracting the slide, timing means controlling the retraction of the slide, means for oscillating the armature-shaft by means of the slide, two electrodes, one fixed and the other movable, the movable electrode being provided with an arm, an adjusting-screw rotatably mounted in said arm and adapted to be struck by the hammer-arm when the armature-shaft is retracted, and means for normally holding the two electrodes in contact with each other.

6. In igniters for explosive-engines, the

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combination with an electric circuit having included therein two electrodes, of means for holding the electrodes normally in contact with each other, an oscillatory armature, a reciprocating slide, means for oscillating the armature by means of the slide, a reciprocating actuating device reciprocated by the running of the engine and provided with means for engaging and moving the slide in one direction, a tripping device for releasing the slide from the actuating device, means for retracting the slide, and means for separating the electrodes when the slide is retracted.

7. In igniters for explosive-engines, the combination with an electric circuit having included therein two electrodes, of means for holding the electrodes normally in contact with each other, an oscillatory armature included in the said circuit, a reciprocating slide, means for oscillating the armature by means of the slide, a reciprocating actuating device reciprocated by the running of the engine and provided with means for engaging and moving the slide in one direction, an adjustable tripping device for releasing the slide from the actuating device, means for retracting the slide when the same is released from

the actuating device, and means for separating the electrodes when the slide is retracted.

8. In igniters for explosive-engines, the combination with an electric circuit of two electrodes one of which is movable toward and from the other, means for normally holding the electrodes in contact with each other, an oscillatory armature provided with a winding included in the said circuit, an oscillatory shaft on which the armature is mounted, a crank carried by said shaft, a reciprocating slide, a rod connecting said slide and said crank, a magnetic field in which the armature is located, means controlled by the running of the engine for moving the slide in one direction, means for retracting the slide in the opposite direction, adjustable timing means for determining the time of retraction of the slide, and means for separating the electrodes when the slide is retracted.

In testimony whereof I have signed my name to this specification in presence of the two subscribing witnesses.

GEORGE J. WEBER.

Witnesses:

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JESSIE R. COMSTOCK.

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SPARKING IGNITER.

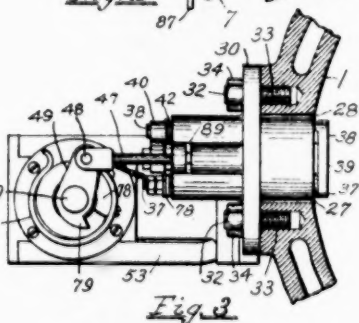
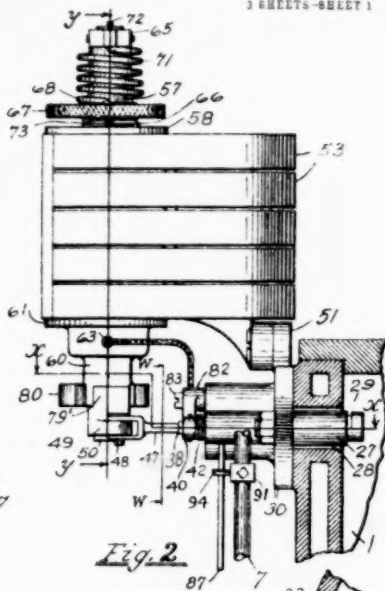
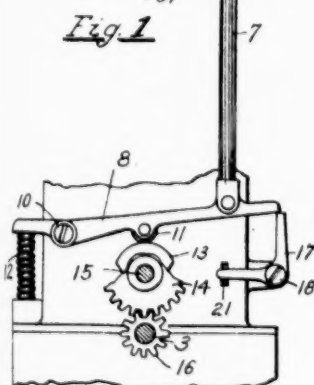
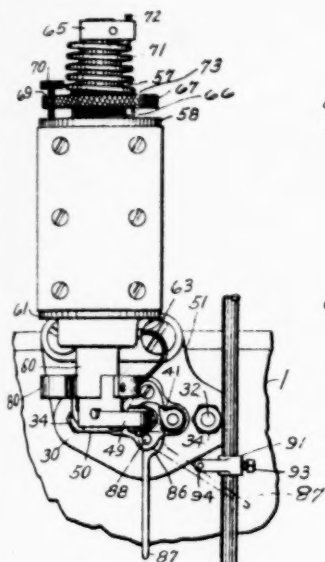
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APPLICATION FILED JUNE 1, 1910

990,935.

Patented May 2, 1911.

3 SHEETS-SHEET 1



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Fig. 4 36 27
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3 SHEETS-SHEET 2

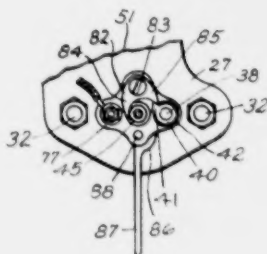


Fig. 5

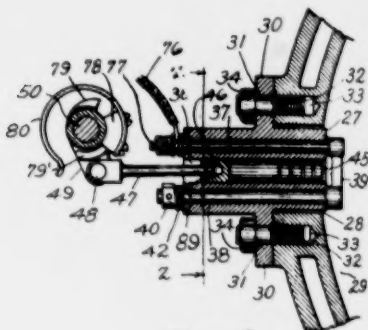


Fig. 6

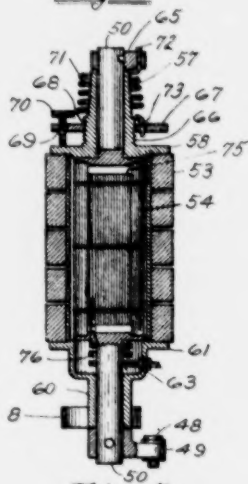


Fig. 7

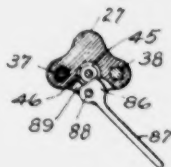


Fig. 8

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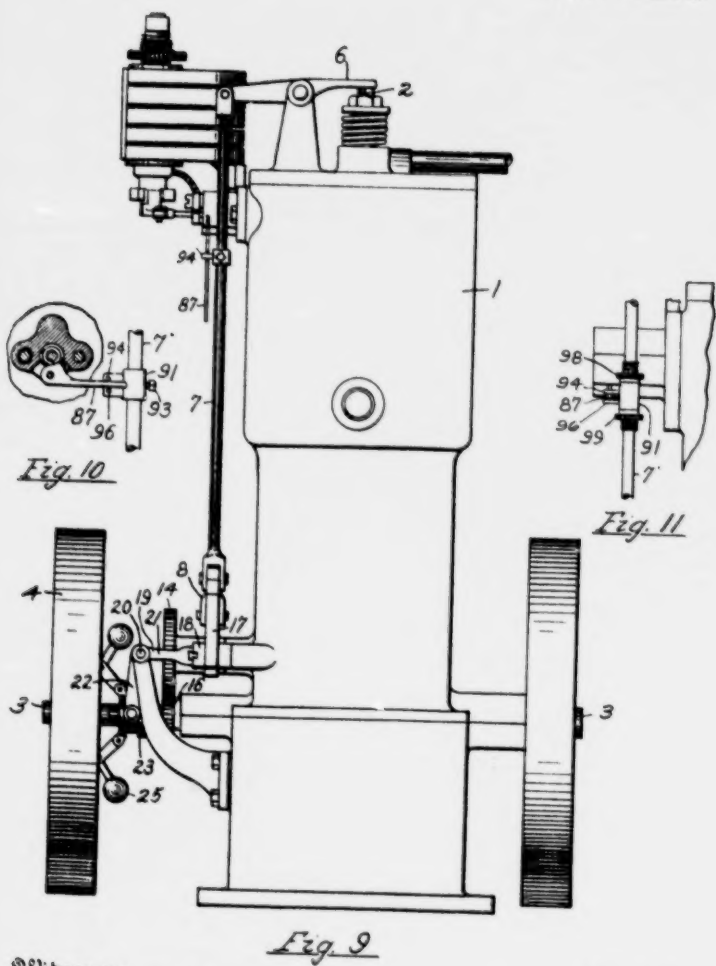
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3 SHEETS-SHEET 3.



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SPARKING IGNITER.

9900,9375.

Specification of Letters Patent.

Patented May 2, 1911.

Application filed June 1, 1910. Serial No. 864,472.

To all whom it may concern

Be it known that I, LUTHER H. WATTLES, a citizen of the United States, residing at Providence, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Sparking Igniters, of which the following is a specification.

My invention relates to sparking ignition devices for internal combustion engines. In my prior Patent No. 909,264 issued Jan. 12, 1909, is shown a device of this character wherein a sparking current is generated by the unignited compressed engine charge.

The essential objects of the present invention are to regulate the instant of sparking; to secure a maximum efficiency of the engine charge; to prevent, when starting the engine, injury to the operator due to the initial expansion of the compressed charge while manipulating the fly wheel; to afford a positive and direct electrical communication between the electrodes and the magneto armature; to cushion the outward stroke of the piston; to make it possible to dispense with elaborate mechanism for returning the piston to original position, and to dispense with the generator piston valve; to simplify and cheapen the structure; and to render the same available upon engines of various types without reorganization.

Other objects will be hereinafter pointed out.

To the above ends primarily my invention consists in the construction, combination, and mode of operation of parts set forth in and falling within the scope of the claims hereto appended.

In the accompanying drawings which form a part of this specification and in which like reference characters indicate like parts throughout the views, Figures 1, 2, and 3, are front, side and bottom plan views respectively of my novel apparatus mounted in the side of an engine cylinder, showing in Fig. 1 also a usual engine valve operating mechanism. Fig. 4, a bottom plan view of the plug. Figs. 5, 6, and 7, sections on line w, w, x, x; and y, y, of Fig. 2. Fig. 8, a section on line z, z, of Fig. 6. Fig. 9, a side elevation of an upright four cycle internal combustion engine equipped with my device, and Figs. 10 and 11, detail views of modified means for actuating the piston locking member.

In the illustrated construction the engine comprises a cylinder or casting 1, exhaust valve, 2, crank shaft 3, fly wheel 4, and the usual valve operating mechanism, consisting of the valve lever 6, valve connecting rod 7, cam lever 8, stud 10, cam roll 11, cam lever spring 12, cam 13 integral with driven gear 14 loose on stud 15, driving gear 16, bell crank lever 17 upon its stud 18, connecting bell crank lever 19 pivoted on stud 20 and whose forked arm 21 engages lever 17 and whose other arm 22 is connected with the sliding sleeve 23, controlled by the fly ball governor 25. It is in conjunction with the above described familiar parts that my novel device is in this instance set forth.

My device comprises a plug 27 extending into an opening 28 in the casting 1 to which it is engaged in any convenient manner with its end face exposed in the compression area of the combustion chamber 29. In the present instance the plug is provided with an external flange 30 with perforations 31 for screws 32 entering threaded openings 33 in the casting and secured by nuts 34. The plug 27 preferably extends beyond the face of the casting and is longitudinally bored to form a chamber 36. Fixed within the plug and insulated therefrom is an electrode 37, and axially movable in the plug is the grounded electrode 38 having its outer end extending beyond the face of the plug and provided with a contact arm 39 within the combustion chamber. Integral with or fixed to the outer end of the electrode 38 is a collar 40 provided with a peripheral lug 41. A spring 42 surrounding the electrode has its ends fixed in the collar and in the plug respectively. Mounted in the chamber 36 is a piston 45 provided with a beveled outer end as at 46. A connecting rod 47 connects the piston through a crank pin 48 with a crank arm 49 fixed to an armature shaft 50 of an electric generator supported by a bracket arm 51 fixed to the plug.

The generator or magneto may be of any usual construction and in this instance comprises horse shoe magnets 53 surrounding a core 54 whose armature 55 has an upper vertical bearing 57 provided with a flange or base 58 fixed to the top of the magnets. The lower end of the armature shaft is journaled in a bearing 60 provided with a flange 61 fixed to the bottom of the magnets, and provided with an opening 63 in its side wall.

Fixed to or integral with the upper end of the shaft 50 is a collar 65. The exterior of the bearing 57 has threads 66. An annular disk 67 has threads 68 engaging threads 66 and is provided with a threaded perforation 69 to receive a thumb screw 70 whose end engages the flange 58. Surrounding the bearing 57 is a spring 71 whose upper end 72 is fixed to the collar 65, and whose lower end 73 is fixed to the disk 67. One terminal 75 of the winding is grounded in the core while the other terminal 76 is formed in a loose spiral around the shaft 50 and passes through the opening 63 to the binding post 77 upon the outer end of the electrode 37, thus completing the circuit through the sparking finger 39 and thence back through the magneto to the armature.

In order to limit excessive travel of the crank arm 49 a block 78 fixed to the side of the bearing 60 extends into the path of lugs 79 and 79' upon the arm. The outward stroke of the piston is in this instance cushioned by a curved spring 80 fixed to the block 78 and whose free end is in the path of the arm 49. The spring 80 may be omitted when the spring 71 is sufficiently stiff. A member for actuating the electrode 38, as shown in Fig. 5, consists of a lever of the first principle 82 pivoted by a pin 83 to the outer face of the plug 27 and comprises an arm 84 in the path of the beveled portion of the piston 45, and an arm 85 in contact with the lug 41 upon the collar of the electrode 38.

A piston locking member, best shown in Fig. 8, comprises a cam shaped or offset flat head 86 and a shank or handle 87. This member is eccentrically mounted upon a pivot 88 in the plug and moves in a slot 89 opening into the chamber 36 and transversely thereof. When the shank 87 is in normal or vertical position the head 86 is out of the path of the piston 45, but when the shank is elevated the head intersects the path of the piston and prevents the outward stroke of the latter. This arm may be elevated manually at will to the position shown in broken lines in Fig. 1, where it is frictionally held, until released and permitted to fall into vertical position. The release is effected either manually or by any convenient device attached to the engine driven mechanism. Such a device consists of a vertically adjustable sleeve 91 clamped by an adjusting screw 93 to the reciprocating connecting rod 7, and provided with a laterally projecting pin 94 in the path of the shank 87.

The operation of my device is as follows. The unignited compressed engine charge in the combustion chamber 29 impels the armature piston 45 outwardly with great force partially rotating the armature shaft 50 at a high rate of speed thus generating a current in the electric circuit. This circuit is

broken to create a spark in the combustion chamber by the contact of the piston 45, in its outward travel, with the lever arm 82 which through arm 85 partially rotates the electrode 38 thereby swinging the arm 39 out of contact with electrode 37. The electrode is returned by the spring 42, and the piston, by the spring 71. It will be noted that in the present instance the terminal 76 runs directly from the winding to the electrode without the intervention of a brush or any moving contact whereby a more positive electrical effect is secured.

In order to utilize the maximum power of the charge provision is made for regulating the instant of sparking relatively to the position of the engine crank, so that when the engine is running at high speed the sparking will occur earlier; and when at a low speed, later. These results are respectively secured by manually turning the disk 67 upwardly or downwardly to increase or decrease the tension of the spring 71. This adjustment can be made while the engine is in operation. The screw 70 binds the disk in adjusted position.

To avoid accident in starting the engine the magneto is held out of operative position by manually elevating the handle 87, thereby checking the advance of the piston 45 during the initial compression revolution of the fly wheel, after which the handle 87 is returned to normal vertical position either manually or automatically thereby releasing the armature piston.

In some engines it is desirable to elevate the shank 87 automatically rather than manually. In "variable quantity" engines alternate strokes of the engine piston produce varying degrees of compression. In such case regularity of movement of the armature piston 45 is insured by the continuous vibration of the shank 87. I prefer for this purpose a device like that shown in Fig. 10 comprising interspaced pins 94 and 96 which loosely engage therebetween the shank 87 which is vibrated by the rod 7. The sleeve 91 is adjustable upon the valve operating rod 7 by the screw 93, but in some instances a preferable adjusting means is that shown in Fig. 11, where this means consists of thumb nuts 98 and 99 threaded to the rod 7 above and below the sleeve 91 whereby the sleeve may be adjusted while the engine is operating.

What I claim is,—

1. In an electric sparking ignition mechanism, the combination with an engine cylinder and an ignition circuit, of an electric generator comprising an armature shaft in the circuit, and a bearing in which the armature is mounted, means actuated by the charge in the cylinder for imparting a generating throw to the armature shaft, and a spring mounted upon the bearing and en-

gaging the armature shaft for returning the armature shaft to original position.

2. In an electric sparking ignition mechanism, the combination with an engine cylinder and an ignition circuit, of an electric generator comprising an armature shaft in the circuit, and a bearing in which the armature is mounted, means actuated by the charge in the cylinder for imparting a generating throw to the armature shaft, a spring mounted on the bearing and engaging the shaft, and means for varying the tension of the spring.

3. In an electric sparking ignition mechanism, the combination with an engine cylinder and an ignition circuit, of an electric generator comprising an armature shaft in the circuit, and a bearing in which the armature is mounted, means actuated by the charge in the cylinder for imparting a generating throw to the armature shaft, a rotatably adjustable member mounted upon the bearing, and a spring upon the bearing engaging both the shaft and the adjustable member.

4. In an electric sparking ignition mechanism, the combination with an engine cylinder and an ignition circuit, of an electric generator comprising an armature shaft in the circuit, and a bearing in which the armature is mounted, means actuated by the charge in the cylinder for imparting a generating throw to the armature shaft, a rotatably adjustable member mounted upon the bearing, a spring upon the bearing engaging both the shaft and the adjustable member, and means upon the adjustable member for maintaining said member in adjustable position.

5. In an electric sparking ignition mechanism, the combination with an engine cylinder, and a generator having an armature shaft, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, driving connections between the piston and armature shaft, and means upon the generator and engaging the armature shaft for returning the piston to original position after each stroke.

6. In an electric sparking ignition mechanism, the combination with an engine cylinder, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the piston chamber, a fixed electrode in the plug, an axially movable electrode mounted in the plug, an arm on the second electrode normally in contact with the first electrode, a projection upon the second electrode, a lever provided with two arms pivotally mounted upon the plug, one of the lever arms extending normally in the path of the piston, and the other lever arm engaging the projection upon the electrode.

7. In an electric sparking ignition mechanism,

the combination with an engine cylinder, and a generator having an armature shaft and bearing, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, a crank upon the armature shaft, a rod connecting the piston and crank, a lug upon the crank, and a block upon the bearing in the path of the lug.

8. In an electric sparking ignition mechanism, the combination with an engine cylinder, and a generator having an armature shaft and bearing, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, a piston in the chamber, a crank upon the armature shaft, a rod connecting the piston and crank, and a spring fixed to the bearing and extending into the path of the crank.

9. In an electric sparking ignition mechanism, the combination with an engine cylinder, of a spark plug in the cylinder provided with a piston chamber opening into the cylinder, an axially movable electrode mounted in the plug, a piston in the piston chamber, means for driving the piston, means actuated by the piston for rotating the electrode, and means in the plug for locking the piston against movement.

10. In an electric sparking ignition mechanism, the combination with an engine cylinder, an ignition circuit, and an electric generator having an armature shaft, of a piston operatively connected with the generator armature shaft and actuated by the charge in the cylinder, and means for locking the piston against movement.

11. In an electric sparking ignition mechanism, the combination with the engine cylinder, the generator, the armature shaft, and the ignition circuit, of a spark plug mounted in the cylinder and provided with a piston chamber communicating with the cylinder, a piston in the chamber, driving connections between the piston and the armature shaft, a swinging locking member mounted in the plug and movable into the path of the piston and means for actuating the locking member.

12. In an electric sparking ignition mechanism, the combination with the engine cylinder, of a spark plug mounted in the cylinder and provided with a piston chamber communicating with the cylinder, and provided with a transverse slot opening into the piston chamber, a piston in the piston chamber adapted to be actuated by a compressed charge in the cylinder, and a piston locking member pivotally mounted in the plug comprising a broad head located in the slot, and a shank upon the head extending outside the plug.

13. In an electric sparking ignition mechanism, the combination with the engine cylinder, the valve connecting rod, the genera-

tor, and the ignition circuit, or a spark plug mounted in the cylinder and provided with a piston chamber communicating with the cylinder, a piston in the chamber operatively connected with the generator, a piston locking member pivotally connected intermediate its length with the plug comprising a head movable into the path of the piston and a shank extending from the plug, and a projection carried by the valve connecting rod in the path of the shank.

14. In an electric sparking ignition mechanism, the combination with the engine cylinder, the valve connecting rod, the generator, and the ignition circuit, of a spark plug mounted in the cylinder and provided with a piston chamber communicating with the

cylinder, a piston in the chamber operatively connected with the generator, a piston locking member pivotally connected intermediate its length with the plug comprising a head movable into the path of the piston, and a shank extending from the plug, a sleeve upon the valve connecting rod, means upon the rod adapted to engage the shank of the locking member, and means for adjusting the sleeve.

In testimony whereof I have affixed my signature in presence of two witnesses.

LUTHER H. WATTLES.

Witnesses:

HORATIO E. BELLOWE,
WALTER LOUIS FROST.

1029

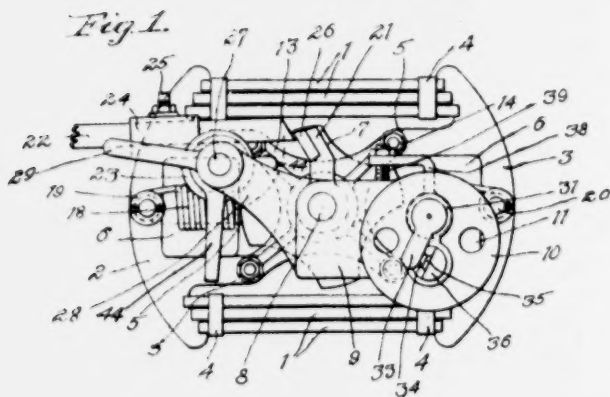
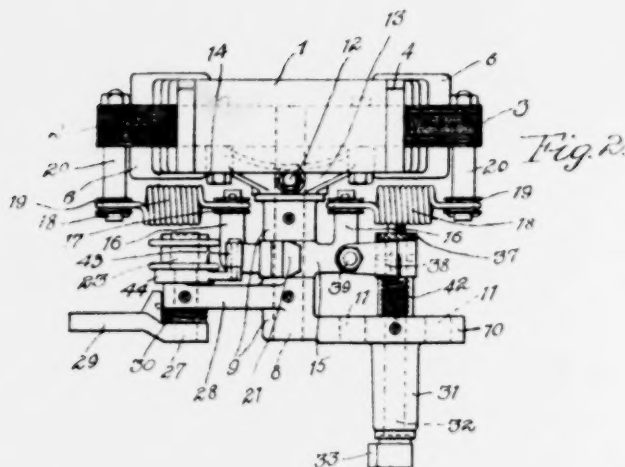
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J. L. MILTON.
MAGNETO GENERATOR.
APPLICATION FILED OCT. 26, 1910.

1,096,048.

Patented May 12, 1914.

2 SHEETS-SHEET 1.



Witnesses

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Leonard W. Novander.

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1030

1046

J. L. MILTON.
MAGNETO GENERATOR.
APPLICATION FILED OCT. 28, 1910.

1,096,048.

Patented May 12, 1914.

3 SHEETS-SHEET 2.

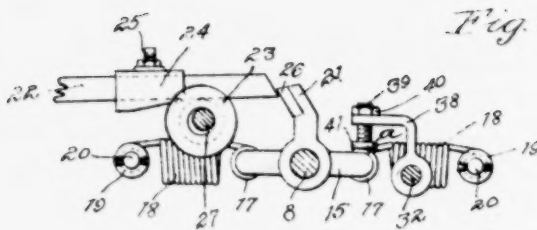


Fig. 4.

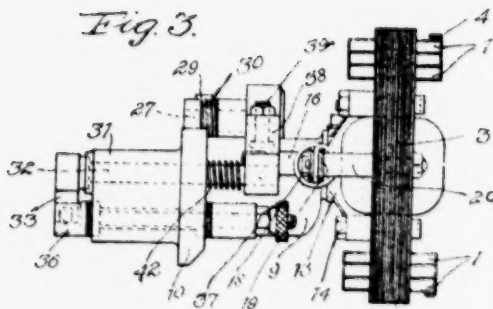


Fig. 3.

WITNESSES

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Inventor
John L. Milton

By *Brown & Williams.*
Attorneys

UNITED STATES PATENT OFFICE.

JOHN LEWIS MILTON, OF TIFFIN, OHIO.

MAGNETO-GENERATOR.

1,096,048.

Specification of Letters Patent.

Patented May 12, 1914.

Application filed October 22, 1910. Serial No. 523,344.

To all whom it may concern:

Be it known that I, JOHN L. MILTON, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented a certain new and useful
 5 Improvement in Magneto-Generators, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a
 10 part of this specification.

My invention relates to magneto generators and ignition mechanism for use in connection with internal combustion engines.

The object of my present invention is to
 15 obtain a cheap and efficient construction while at the same time a construction which will prevent undue hammering of the ignition contacts.

One of the principal features of my invention resides in a malleable iron casting and the parts with which it cooperates in causing the oscillation of the generator inductor and in controlling the movements of the spark contacts. The use of this single
 20 malleable iron casting provides a rigid construction and at the same time one which transmits the necessary motion from the engine mechanism to the inductor of the generator, and which also by means of a cam
 25 surface carried on one of its arms actuates the contact mechanism to cause a sudden separation of the contacts followed, however, by a slow and easy reengagement thereof. Since in the construction of my
 30 invention these spark contacts are brought slowly and easily together, excessive wear is avoided by the prevention of hammering which would otherwise take place.

My present invention may in a general
 40 way be regarded as an improvement upon my co-pending application, Serial No. 475,171, filed January 30, 1909. In that earlier application I disclosed an inductor generator having stationary windings and
 45 an oscillating inductor, this inductor being actuated in one direction by power supplied from the engine with which it was associated, there being provided a set of springs for returning the inductor sharply to its
 50 normal position and beyond, when the inductor was released.

My present invention also utilizes a set of springs for returning the inductor in a reverse direction whenever it is released by the

mechanism which actuates the inductor to carry it into its abnormal position.

My present invention consists also in an arrangement whereby unnecessary hammering of the contacts is avoided, where the reciprocations of the operating rod are more
 60 frequent than the ignition periods, this arrangement consisting of mechanism for throwing the inductor out of action except during such time as the spark is required to pass for ignition purposes.

These and the various other features of my invention will be more clearly understood by reference to the accompanying drawings, in which—

Figure 1 is a front elevation of the generator and its associated parts; Fig. 2 is a plan view thereof; Fig. 3 is an end elevation; Fig. 4 is an isolated elevation of the actuating mechanism.

Like reference characters are applied to the same parts throughout the various figures.

The generator proper comprises the permanent magnets 1, 1, whose consequent poles are secured to the ends of the pole-pieces 2
 80 and 3. The bands 4, 4 clamp the magnets together and hold them in position upon the laminated pole-pieces.

Each of the pole-pieces is provided with three polar projections 5, 5, the middle projection in each instance carrying a winding 6. Rotatably mounted within the embrace of the polar projections is the inductor 7 carried upon the shaft 8. This inductor has generally the shape of a Maltese cross
 90 with diametrically opposite arms adapted when in one position to convey the magnetic flux of the permanent magnets through the polar projections on which the windings 6 are laid and when in the alternate position
 95 to short-circuit the magnetic flux around these central poles.

The shaft 8, which carries the oscillating inductor is journaled in the bracket 9 which extends from the plate 10, this plate being
 100 provided with openings 11, 11, through which bolts pass to secure the plate directly to the cylinder or other combustion chamber of an internal combustion engine. The arms of a brass spider 13 are attached to the polar
 105 projections of the field magnet by the bolts 14, 14, the hub of the spider in turn being mounted upon a boss extending from the

bracket member 9, the spider and thus the field-magnet being held in fixed position by means of the set screw 12.

An actuating yoke 15 of malleable iron is mounted upon the shaft 8 between the two journals of the bracket member 9, the yoke and the shaft being keyed together preferably by means of a taper pin. The yoke is provided with two arms 16, 16 which extend from diametrically opposite sides of the hub, where they turn and become parallel with the shaft 8 at diametrically opposite positions. At the end of each arm is a grooved roller 17. The free ends of the helical actuating springs 18, 18 are hooked over these rollers, the other ends of the springs being hooked over similarly grooved rollers 19, 19 carried by posts 20, 20 extending from the field pole-pieces 2 and 3. These posts are mounted at diametrically opposite points, wherefore the actuating springs tend always to return the yoke 15 and thus the inductor to their normal position.

A steel faced operating arm 21 extends upwardly from the hub of the yoke 15 where it is adapted for engagement by the end of the reciprocating rod 22 connected and driven in any suitable manner from the shaft of the engine with which the ignition mechanism is associated. A roller 23 carries the free end of the actuating rod 22 except when the lower cam surface of the adjustable sleeve 24 rides up on the roller to disengage the end of the actuating rod from the face of the operating arm 21. The exact time in the cycle of the engine at which this release of the yoke and hence of the inductor takes place may be regulated by adjusting the position of the sleeve 24, the set screw and nut 25 serving to maintain the proper adjustment. The hardened steel face 26 of the operating arm 21 will prevent undue wear at this point.

The roller 23 is eccentrically mounted upon a post 27 which is carried by an arm 28 extending from the bracket 9. A starting lever 29 is keyed to the end of the post 27 whereby the post may be turned in one direction or the other to raise or lower the roller 23 due to its eccentric mounting upon the end of the post. A small spring 30 connected with the starting lever 29 and with the extension 28 tends to hold the starting lever always in the running position. When it is desired to retard the production of the spark at the contact points as in starting the engine, the lever 29 is thrown manually into a position in which the roller 23 is lowered, thereby delaying slightly the disengagement of the end of the actuating rod from the corner of the operating arm 21 and thus delaying also the spark production.

Coming now to the mechanism for controlling the operation of the contacts, a boss 31 will be seen to extend from the bolting

plate 10. Through this extends a spindle 32. At the end of the spindle is a swinging contact arm or crank 33 upon which is mounted the platinum or other contact point 34 adapted for operation with the contact point 35, mounted upon the post 36 suitably insulated from the plate 10 and the other parts of the mechanism. The post 36 terminates in a binding screw 37 to which the conductor leading from one end of the field magnet windings is electrically connected. At the other end the contact spindle 32 is provided with an L-shaped arm 38 through which passes the adjusting screw 39 of the anvil 41, the lock nut 40 serving to maintain the adjustment. A very light helical spring 42 surrounds the spindle 32 between the plate 10 and the arm 38 and, being connected at one end with the plate 10 and at the other end with this actuating crank 38, it tends to turn the spindle 32 in a direction which will bring the contact points 34 and 35 into engagement with one another. The drawings show these several parts in their normal positions.

The position of the anvil 41 is such that the upper surface of an arm 16 of the yoke 15 will engage it to cause a separation of the contact points 34 and 35. It will be noted that the arm 16 forms a curved cam surface *a* adapted to engage the lower side of the anvil 41 whereby the overrunning of the inductor and yoke piece 15 upon their release from the actuating rod 22 will cause this cam surface to engage the anvil with a sharp sudden hammer-like blow, thus causing a correspondingly sudden opening of the contact points 34 and 35. The actuating springs 18 promptly return the yoke member 15 to its normal position after the overthrow which follows the release of its operating arm 21 from the pressure of the actuating rod 22. During this return movement the anvil 41 rides smoothly and easily over the curved cam surface of the engaging arm 16 of the yoke 15. The light spring 42 causes the actuating crank 38 to follow the yoke-arm 16 in this return movement, thereby causing the contact points 34 and 35 to be returned slowly and easily to their normal contact positions. The surface of the arm which acts as a cam in conjunction with the anvil 41 is curved as shown in the drawing to avoid the pounding of the contact mechanism. The distance between the anvil 41 and the cooperating cam surface *c* of the yoke arm may be adjusted to cause the contact points 34 and 35 to separate just at the proper point in the current wave production.

An auxiliary roller 43 is mounted upon a bell crank lever 44, this bell crank lever being pivotally mounted on the post 27. The depending arm 44 is adapted to be controlled by the engine governor. Thus when

the speed of the engine exceeds the limit for which the governor is set, the roller 43 is elevated to lift the actuating rod 22 clear of the operating arm 21, thus preventing the oscillation of the inductor and at the same time the actuation of the contacts 34 and 35.

While I have shown and described a preferred embodiment of my invention, it will be apparent to those skilled in the art that many modifications may be made without departing from the spirit thereof.

What I claim as new and desire to secure by Letters Patent is:

1. In combination, a field magnet, an inductor mounted upon a shaft for oscillation relative to the field magnet, a yoke mounted upon the shaft for oscillation with the inductor, an operating arm carried by the yoke, a reciprocating member driven by an internal combustion engine to engage the operating arm to swing the yoke in one direction, means for disengaging the reciprocating member from the operating arm to permit the oscillating parts to return to their normal position, spring mechanism connected with the diametrically opposite arms of the yoke, to return it to the normal position when relieved of the pressure of the reciprocating member, a curved cam surface on one arm of the yoke, a fixed electrical contact and a swinging electrical contact in the combustion chamber of the internal combustion engine, a spindle upon which the swinging contact is mounted, a push finger mounted upon the contact and spindle and carrying an anvil normally disengaged from the cam surface of the yoke but adapted to be engaged by the cam surface upon the overthrow of the oscillating yoke to separate the electrical contacts, and a light spring acting to bring the swinging contact and the push finger into their normal positions.

2. In a device of the class described, a suitable field magnet, an inductor adapted for oscillating with respect to the field magnet, a yoke rigidly connected with the inductor and having projections at diametrically opposite points, main actuating springs connecting the projections of the yoke with suitable stationary projections on the frame, the said actuating springs tending always to return the oscillating members to their normal positions, a pair of electrical contacts in the combustion chamber of an internal combustion engine, a light spring tending to maintain the closure of said electrical contacts, a push finger adapted when struck to separate the electrical contacts against the tension of the light spring, a curved cam surface on the yoke adapted to engage the push finger upon the overthrow of the yoke when returned to its normal position by the main actuating springs, an operating arm associated with

the yoke, and reciprocating mechanism driven by the internal combustion engine to engage the operating arm to swing the yoke and the inductor out of their normal position.

3. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation within the field magnet, a pair of main actuating springs, each connected at one end with the field magnet frame, an integral yoke member rigidly connected with the inductor, the main actuating springs being connected at their free ends with the said yoke member, an operating arm constituting a part of the integral yoke member and adapted to be engaged by a reciprocating member driven by an internal combustion engine, separable contact points within the combustion chamber of the internal combustion engine, a light spring tending to maintain the closure of the electrical contacts, and mechanism adapted to be engaged by a cam surface on the yoke member to cause the separation of said contacts in opposition to the tension of the said light spring.

4. In a device of the class described, the combination of a field magnet, an inductor mounted for oscillation therein, spring mechanism tending to return the inductor to its normal position when moved out of said normal position, an operating arm for turning the inductor out of its normal position, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod being adapted normally to engage the end of the inductor-operating arm, means for shifting the path of travel of the reciprocating rod to determine its engagement with the operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and a member fixed relative to the inductor adapted to effect the operation of said contacts to create an ignition spark within the combustion chamber of the engine.

5. In a device of the class described, a field magnet, an inductor mounted for oscillation therein, an operating arm for said inductor, a reciprocating actuating rod driven from the shaft of an internal combustion engine, the end of the reciprocating rod adapted normally to engage the end of the inductor-operating arm, generating windings supported by the field magnet, separable electrical contacts in the combustion chamber of the engine, and an impact member fixed relatively to the inductor adapted to separate said contacts to create a spark in the combustion chamber.

6. In a device of the class described, a field magnet, a shaft, an inductor mounted upon the shaft for oscillation relative to the

field magnet, a yoke mounted upon said shaft for oscillation with said inductor, springs tending to retain the inductor and shaft in normal position, an engine-driven member for oscillating said shaft and parts carried thereby, separable electrical contacts within the combustion cylinder of the engine, and an impact member fixed relative to the inductor and shaft arranged to effect the separation of said contacts to create an

ignition spark in the combustion chamber of the engine.

In witness whereof, I hereunto subscribe my name this 26th day of October, A. D. 1910.

JOHN LEWIS MILTON.

Witnesses:

ALEXANDER KISKADDEN,
EUGENIA K. ADAMS.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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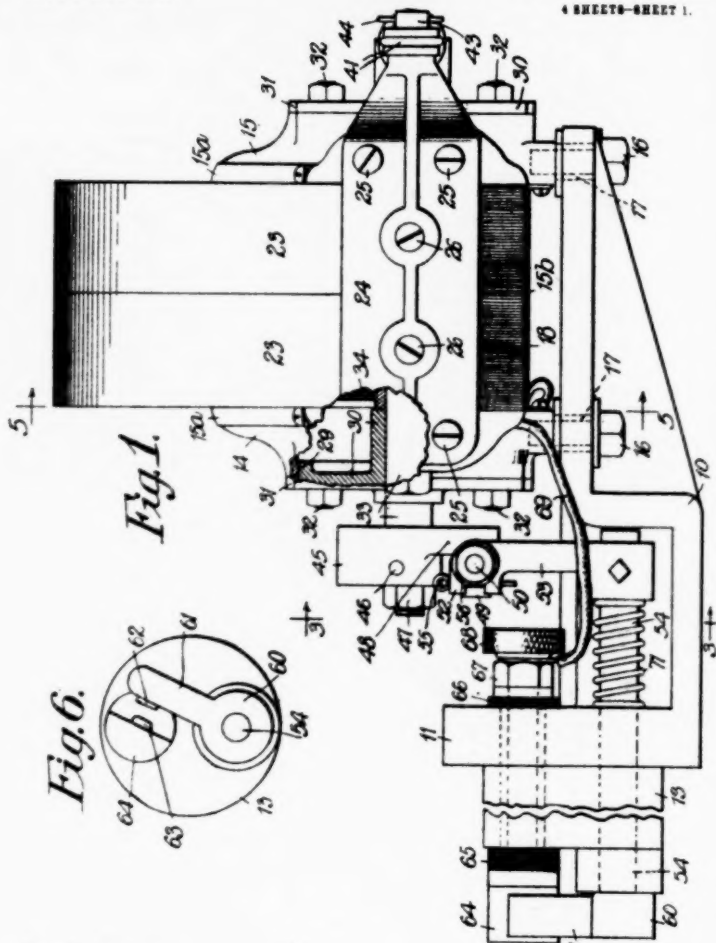
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E. PODLEŠÁK.
MAGNETO MACHINE.
APPLICATION FILED JULY 21, 1911.

1,098,052.

Patented May 26, 1914.

4 SHEETS—SHEET 1.



Witnesses

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L. W. Kovander

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Emil Podlešák

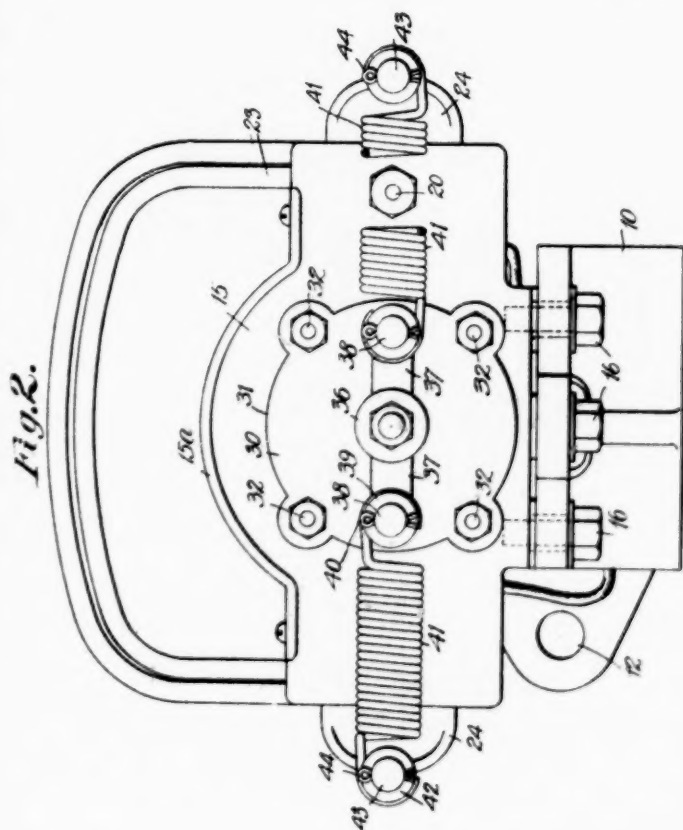
By *Proctor, Williams*
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E. PODLESÁK.
MAGNETO MACHINE.
APPLICATION FILED JULY 31, 1911.

1,098,052.

Patented May 26, 1914.

4 SHEETS—SHEET 2.



Witnesses:

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1037

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E. PODLEŠÁK.
MAGNETO MACHINE.

APPLICATION FILED JULY 21, 1911.

1,098,052.

Patented May 26, 1914

4 SHEETS-SHEET 3.

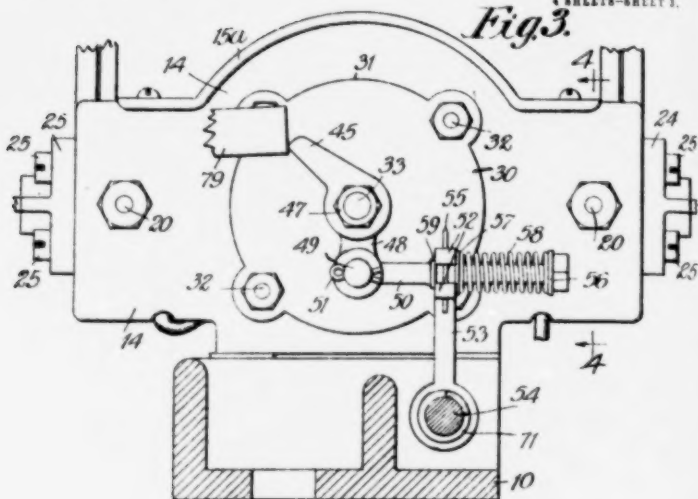
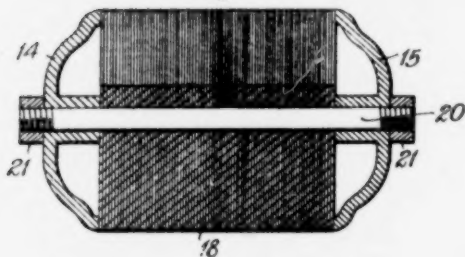


Fig. 4.



Witnesses:

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E. PODLEŠAK.
MAGNETO MACHINE.
APPLICATION FILED JULY 21, 1911.

1,098,052.

Patented May 26, 1914.

4 SHEETS—SHEET 4.

Fig. 7.

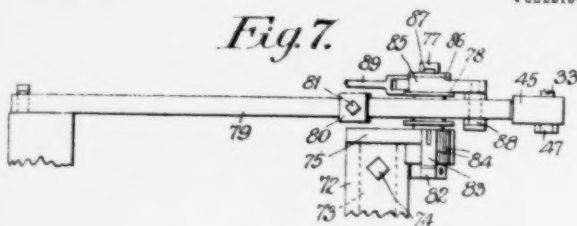


Fig. 5.

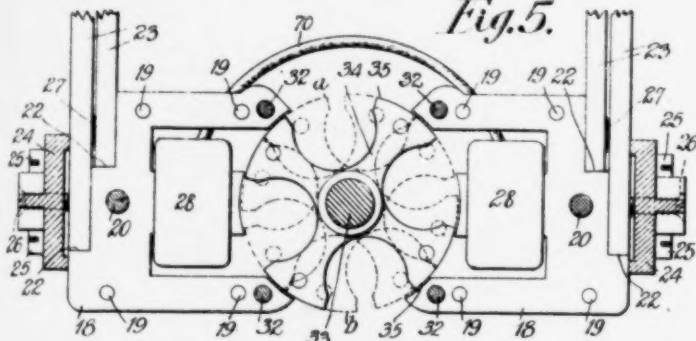


Fig. 9.

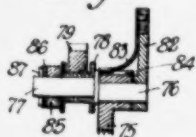
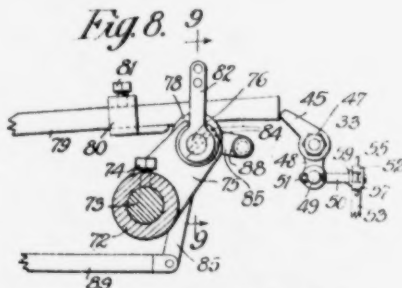


Fig. 8.



Witnesses:

Albin C. Ahlberg
L. W. Novander.

BY

Inventor
Ernő Podlešák
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Attorneys

UNITED STATES PATENT OFFICE.

EMIL PODLEŠÁK, OF TIFFIN, OHIO.

MAGNETO-MACHINE.

1,098,032.

Specification of Letters Patent.

Patented May 26, 1914.

Application filed July 21, 1911. Serial No. 639,732.

To all whom it may concern :

Be it known that I, EMIL PODLEŠÁK, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented certain new and useful Improvements in Magneto-Machines, of which the following is a full, clear, concise, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to magneto machines and it contemplates a generally improved device. Its object is to produce a magneto machine which will be substantially less expensive than devices of the prior art, which will be of more simple and reliable construction and which will be more durable and more efficient.

To the ends above noted I have invented various features of construction and arrangement, new in themselves and influentially related, touching not only upon the magneto itself, but also upon the sparking mechanism, for association with an internal combustion engine, to which it is peculiarly adapted.

Specifically, therefore, my device is a magneto machine for ignition purposes and the various features of construction to which I have referred will be found to be consistent with this use. In addition to these various features of construction and arrangement, I provide for an entirely new manner of operation which could be carried out by mechanisms other than those herein specifically shown. It will be seen, however, that some of the more specific of the appended claims bring out the detailed construction involving this operation, which is particularly useful and advantageous in this respect.

The various features of my invention are embodied in the magneto machine illustrated in the accompanying drawings, in which—

Figure 1 is a side elevational view thereof; Fig. 2 is an end elevational view thereof; Fig. 3 is a partial view taken on the plane of the line 3—3 of Fig. 1 and looking in the direction indicated by the arrows; Fig. 4 is an isolated sectional view taken on the plane of the line 4—4 of Fig. 3 and looking in the direction indicated by the arrows; Fig. 5 is a partial sectional view taken on the plane of the line 5—5 of Fig. 1 and looking in the direction indicated by the arrows; Fig. 6 is

an isolated face view of the spark gap mechanism; Fig. 7 is a plan view of the actuating mechanism; Fig. 8 is a fragmentary elevational view of some of the parts shown in Fig. 7, some parts being shown in section; and Fig. 9 is a sectional view taken on the plane of the line 9—9 of Fig. 8 and looking in the direction indicated by the arrows.

This type of machine is adapted to be bolted directly upon the engine casting. The various parts are carried upon a comparatively heavy supporting frame or shelf 10 which is provided with the upright flange 11 having openings 12 through which cap bolts may be passed into the engine casting. A cylindrical boss 13 extends forwardly from this upright flange and is adapted to fit in a corresponding opening in the engine casting so that the spark gap terminals which are carried thereby and which will be described later may be disposed directly in the engine cylinder.

Two non-magnetic supporting side plates 14, 15, upon which various other parts of the magneto are carried, are bolted to the frame or shelf 10 by means of cap bolts 16, 16 passing through enlarged openings 17, 17 in the frame and into the bottom of the side plates as illustrated in Figs. 1 and 2. The utility of these enlarged openings will appear presently. There are preferably three of these cap bolts and the three supporting points thus determine the supporting plane and a rigid arrangement is secured. Between these supporting side plates, at each end thereof, a laminated pole piece 18 is clamped, these pole pieces comprising laminations riveted together at 19, 19. As shown in Figs. 4 and 5, bolts 20, 20 pass through the pole pieces and through the side plates and at the ends are provided with nuts 21, 21 so as to secure a mechanically resistant arrangement.

The outer end of each pole piece 18 is stepped as indicated at 22, 22 for the reception of permanent horse shoe magnets 23, 23 which thus pass from one pole piece over to the other as shown in Figs. 1 and 2. These horse shoe magnets are held firmly upon the pole pieces by means of the end plates 24, 24 which are secured to the ends of the side plates 14 and 15 by means of bolts 25, 25. As to the magnets, there are two sets of two, the inner magnets resting upon the

upper step 22 and the outer magnets resting upon the lower step 22. Set screws 26, 26, one for each side of each pair of magnets, have threaded engagement with the end plates 24, 24 and are screwed in to abut against the magnets to clamp them firmly in place. Di-hed springs 27, 27 are interposed between the magnets of each pair, near each end, as illustrated in Fig. 5, in order to transmit the clamping action.

The members 18, 18 are tri-polar and the middle polar extension of each of them is provided with a generating coil 28, 28. Each of the side plates 14 and 15 has a central opening 29, these openings alining upon an axis disposed midway between the pole faces, as will be pointed out presently. In each of the openings 29 a non-magnetic collar 30 is secured, the flange 31 of this clamp being secured to the face of the side plate by means of bolts 32, 32. These bolts, as shown in Fig. 5, extend through the outside polar extensions of the pole pieces in order to assist in clamping the laminations together. The collars 30, 30 form bearings for the rotor shaft 33 upon which the rotor 34, having four faces 35, 35, is secured. The overall periphery of the rotor is cylindrical and this form corresponds with the cylindrical internal faces of the polar projections, all as illustrated in Fig. 5. The faces of the rotor are approximately the same width, as the faces of the middle polar projections and are considerably greater in width than the outside polar faces. Furthermore, the rotor faces are broad enough to span the distance between the middle polar faces and the outside polar faces, but not wide enough to span the distance between the outside polar faces on one side and those on the other. A thin brass plate 15^a is secured across the top of the side plates and a thin brass plate 15^b is secured across the bottom of the side plates in order to inclose and protect the rotor.

On the outside, beyond the side plate 15, the rotor shaft 33 has rigidly secured thereto a hub 36 which is provided with the oppositely extending arms 37, 37. Each of these arms is provided at its end with a portion 38 turned outwardly at right angles and provided with a spool 39 slipped thereon and retained in place by means of a cotter pin 40. One end of a coiled spring 41 is wound about each spool 39 and the other end of each spring is wound about a spool 42 mounted upon a stud 43 extending from the corresponding end plate 24, a cotter pin 44 being provided to hold this latter spool in place. The tendency of the springs 41, 41 is to keep the arms 37, 37 in a horizontal position, as shown in Fig. 2, and when they are in this position the rotor is in the position shown in full lines in Fig. 5. Upon the opposite end of the rotor shaft 33, which

is slightly reduced, a finger 45, preferably of tool steel, is secured by means of a cross pin 46 and a nut 47. This finger, as will be described later, is adapted to be engaged intermittently by a push rod operating from the engine shaft. This finger is provided with the downward extension 48 which is provided with a small stud 49 to which the end of a small connecting rod 50 is pivotally attached, the rod being held in place by means of a cotter pin 51. This rod extends to the right (Fig. 3) where it passes between the tangs of the bifurcated ends 52 of a swinging lever 53 rigidly secured upon a shaft 54, this shaft being journaled in the boss 13, as indicated in Fig. 1. A cotter pin 55 retains the connecting rod between the parts 52, 52. The connecting rod extends considerably to the right of the lever 53 and at its end is provided with a shoulder or nut 56 between which and the loose washer 57 thereon the coiled spring 58, encircling it, is disposed. It is clear that the expansive nature of this spring will normally tend to hold the washer 57 against the right side of the operating lever 53. The function of this spring will be pointed out later. The connecting rod 50 is provided with a small shoulder 59 on the left of the oscillating lever and the function of this shoulder will be pointed out later when the operation is described.

The shaft 54 extends forwardly beyond the boss 13 and it is there provided with a hub 60 rigidly secured thereto and having an arm 61. This arm carries the contact piece 62 which cooperates with the stationary contact piece 63 carried upon a stud 64 which is effectively insulated from the boss 13 and the flange 11 by means of the insulating parts 65, 65. The stud 64 extends through the boss 13 and the flange 11 and it is there provided with a nut 67 and with a binding screw 68. It is clear that angular movement of the arm 61 will result in the making or breaking of a circuit between the points 62 and 63. The arm 61 is grounded to the machine and the other contact is insulated therefrom. A suitable insulated conductor 69 connects the binding post 68 and one of the coils 28 while the two coils are connected together by means of a conductor 70. The free terminal of the second coil 28 is grounded to the machine and this completes the circuit for low tension ignition.

The arm 61 is so disposed upon the shaft 54 that when the oscillating lever 53 is in its normal position, that is, when the rotor is in the position shown in full lines in Fig. 5, the contacts 62 and 63 are separated as indicated in Fig. 6. The purpose of this arrangement will be pointed out later when the operation is described. The shaft 54 is capable of a slight longitudinal movement, conveniently due to the play between the

mechanical connections involved, but it is held at one extreme of its movement by means of a coiled spring 71 which surrounds it between the hub of the lever 53 and the flange 11. When it is desired to clean the contacts 62 and 63 they may be brought into engagement and the shaft 54 moved back and forth to rub them together.

Referring to Figs. 7, 8 and 9, it will be seen that a supporting stud 72 is provided and this stud may extend from any suitable part of the engine frame. This stud is provided with a central bore in which a shaft 73 is held in any adjusted position by means of a set screw 74. This shaft 73 carries an arm 75 which, in turn, carries a rotatable stud 76. This stud has a forward extension 77, the axis of which is parallel to but eccentric from the axis of the stud itself, for a purpose which will be pointed out presently, and upon this extension a roller 78 is disposed. A push rod 79 rides upon the roller 78 and, as broadly indicated in Fig. 7, is mechanically connected in some way with the engine shaft. Thus the push rod 79 is guided to abut against the finger 45, as indicated in Fig. 8, and for each reciprocation thereof it moves the finger over to impart a certain amount of oscillation to the rotor. This action is called "cocking the magneto." The push rod is provided with a cam piece 80, secured in any adjusted position by means of the set screw 81 and this cam piece is arranged to engage the roller at the proper moment to raise the push rod and to release the finger 45 so that the rotor may fly back under the influence of the springs 41, 41. As the rotor returns in this manner the magnetic flux is changed so that current is generated in the windings 28, 28 and this causes a spark to pass between the contacts 62 and 63, as will be pointed out more fully later. It will appear that the time at which the finger 45 is released from the push rod 79 is very important and initial adjustment in this respect is secured by giving the arm 75 the proper position and by tightening down the set screw 74 after this position has been attained. It is, however, desirable frequently to change the timing, either to retard or advance the spark, during the operation of the engine, and in order that this may take place I provide an actuating lever 82 upon the stud 76. In turning the stud by means of this lever the roller 78 is raised or lowered because of the eccentric position of the shaft 77 relative to the stud 76, and in this way the time of the release of the finger 45 may be varied. The lever 82 is provided with a spring 83 which is adapted to snap down into any one of the notches 84, 84 on the end of the arm 75 so that the arrangement may be held properly in any adjusted position. In temporarily adjusting the lever 82 the tension of this spring is easily over-

come so that it may snap into the next notch either one way or the other. Also upon the part 77 I mount a bell crank lever 85, held in place by means of a washer 86 and a cotter pin 87, and this bell crank lever is provided upon one arm with a roller 88 which is adapted to engage the under side of the push rod 79. The other arm of this bell crank lever is connected by means of a suitable link 89 with the governing mechanism of the engine and the arrangement is such that when the speed becomes excessive the bell crank lever will be moved in a counter-clockwise direction (Fig. 8) and the push rod 79 will be lifted to such an extent that it can not engage the finger 45 to cock the magneto. When the speed has decreased the bell crank lever turns in the opposite direction and the push rod may again drop down into operative relation with the magneto.

As before stated, the spark contacts 62 and 63 are normally separated from each other. This is important since if for any reason the magneto gives out it is desirable that a battery circuit be connected to provide the spark. If the contacts are normally closed there will be a very large strain upon the batteries and even if storage batteries were used it would result in the consummation of a larger current than is necessary to produce the spark. Another advantage is gained in this respect and that is the elimination or avoidance of most or all of the reverse current. If these contacts are open during the proper part of the cocking of the magneto, there will be no current flowing which will tend to perpetuate itself and to have a counter effect upon the current which is to produce the spark when the rotor is released. It will be seen that in the normal position the rotor barely overlaps the middle polar projections and it is a fact that the rotor faces have left the middle polar projections by a considerable distance before the contacts 62 and 63 come together. Since the middle projections are the only ones which carry windings any effect between the other projections would not be noticeable in this respect, and there is no appreciable counter effect, if any. In cocking the engine the rotor is brought over into approximately the dotted position *a* and upon the fly back it probably reaches the position shown by the dotted lines *b*. With an arrangement of this kind the spark is secured upon the rising flux, and this is desirable since, as has been pointed out, the relation between the rotor faces and the pole faces is such as to bear a peculiarly advantageous relation to the position and operation of the spark contact terminals.

It will be seen that when the rotor is cocked after a considerable movement, certainly after the rotor faces have left the middle polar faces, the contacts will come into

together and the further movement of the finger will be taken up by the spring 58. Upon the release of the finger there will be a short snappy action and the flange 59 on the connecting rod 50 will engage the lever 53 and will strike it a sharp hammer blow, thus suddenly opening the contacts at the proper point in the current wave which is simultaneously generated in the magneto coils. If, however, it be desired to utilize the decreasing flux for the spark, the inductor is so cocked as to bring two opposite arms of the rotor approximately opposite the wound polar projections before releasing.

In this arrangement it is quite essential that the contacts be kept separated until the flux through the wound polar projections has attained a substantially fixed intensity, that is, an intensity which is not varying. The operation of the spark contact terminals should be as above described.

The arrangement between the end plates, the side plates, the magnets and the pole pieces is important since a very rigid structure is secured. The parts are few and the connecting points are few. The rotor shaft finds bearing at both ends and in this way the proper relation to the poles is constantly maintained. The fact that the push finger can be made independently of the other parts is important since it can then be made of tool steel and can be readily replaced without interfering with any other of the mechanisms. This finger must withstand a considerable amount of wear and tear and such an arrangement as I propose is particularly advantageous.

It will be remembered that the side plates which support a number of parts are adjustably mounted upon the supporting frame or shelf, due to the enlarged openings through which the cap holes pass. The mechanical arrangement between the push finger and the sparking mechanism is such that great accuracy is not required and it is not necessary, therefore, to finish the engaging faces of the shelf and the side plates. Approximate mounting is ample and adjustment is easily secured by shifting the side plates about and then tightening the screws as desired.

The parts are easily dismantled. For instance, the cotter pin 55, if withdrawn, will release the entire magneto arrangement from the sparking arrangement and the other parts are equally easy of access for the purposes of inspection and repair.

No special arrangement is required for supporting the springs which operate the oscillating rotor. The springs are conveniently supported from the side plates which perform other useful functions and in this way the number of parts is kept at a minimum. These plates hold the U shaped magnets in proper position and in such position

that the windings and polar projections do not come very close to the intermediate parts of the magnets. In other words, a better field is the result since leakages are almost entirely eliminated.

The means for timing the spark is advantageous. The operating means is held firmly in any position, regardless of where the spark comes in, even though temporary adjustment, during the running of the machine, is available.

I claim as new and desire to secure by Letters Patent:

1. In a magneto machine, pole pieces, horse-shoe magnets spanning said pole pieces, side plates between which said pole pieces are firmly clamped, end plates bolted to the ends of said side plates, a shaft mounted in said side plates, a rotor on said shaft, an arm on said rotor, and a spring extending from said arm to an extension on the adjacent end plate.

2. In a magneto machine, pole pieces, horse-shoe magnets spanning said pole pieces, side plates between which said pole pieces are firmly clamped, end plates bolted to the ends of said side plates, a shaft mounted in said side plates, a rotor on said shaft, oppositely extending arms on said shaft, extensions on said end plates, and a spring extending between each extension and the adjacent arm.

3. In a magneto machine, pole pieces, horse-shoe magnets spanning said pole pieces, side plates between which said pole pieces are firmly clamped, end plates bolted to the ends of said side plates, set screws passing through said end plates and abutting against said magnets to hold them firmly in engagement with said pole pieces, a shaft mounted in said side plates, a rotor on said shaft, an arm on said shaft, and a spring extending from said arm to an extension on the adjacent end plate.

4. In combination, a pair of tri-polar pole pieces, windings on the middle portions thereof, a four-faced rotor mounted to oscillate between said pole pieces, each of said rotor faces being of a width substantially the same as the width of the middle pole piece and being wide enough to span the distances between the middle pole pieces and the outside pole pieces but not great enough to span the distances between opposite pole pieces, contact mechanism mechanically connected with said rotor, the contacts of said mechanism being normally separated and the normal position of the rotor being such that the rotor faces only slightly overlap the middle pole pieces carrying the windings, and means for operating the rotor to cock it in a direction receding from the middle pole pieces and simultaneously closing said contacts together.

5. In combination, pole pieces, a rotor as-

sociated therewith, means for oscillating said rotor, a stationary contact member, an oscillating shaft carrying a contact member for cooperation with said stationary contact member, an operating lever for said oscillating shaft, resilient connections between one side of said operating lever and said rotor, and positive connection between the other side of said operating lever and said rotor.

6. In combination, a pair of pole pieces, a rotor mounted upon a shaft, means for cocking said rotor, spring means for suddenly bringing said rotor back upon its release, an arm upon the rotor shaft, an oscillating shaft, a lever on said oscillating shaft, a connecting rod extending from said arm through an opening in said lever, a head on said connecting rod, a spring disposed between said head and one side of said lever, a collar on the connecting rod adapted to engage the other side of said lever, a contact piece carried by said oscillating shaft, and a stationary contact piece associated therewith, said contacts being normally separated but being brought together by part of the cocking action transmitted through said spring and being suddenly

separated by the engagement of said collar with said lever.

7. In combination, a pair of pole pieces, a rotor mounted upon a shaft, means for cocking said rotor, spring means for suddenly bringing said rotor back upon its release, an arm upon the rotor shaft, an oscillating shaft, a lever on said oscillating shaft, a connecting rod extending from said arm through the bifurcated end of said lever, a head on said connecting rod, a spring disposed between said head and one side of said lever, a collar on the connecting rod adapted to engage the other side of said lever, a contact piece carried by said oscillating shaft, and a stationary contact piece associated therewith, said contacts being normally separated but being brought together by part of the cocking action transmitted through said spring and being suddenly separated by the engagement of said collar with said lever.

In witness whereof, I hereunto subscribe my name this 18th day of July, 1911.

EMIL PODLEŠÁK.

Witnesses:

LEONARD W. NOVANDER,
LEONARD E. BOGUE.

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E. J. KANE.
ELECTRIC IGNITER FOR EXPLOSIVE ENGINES.
APPLICATION FILED FEB. 2, 1910.

1,204,573.

Patented Nov. 14, 1916.
2 SHEETS—SHEET 1.

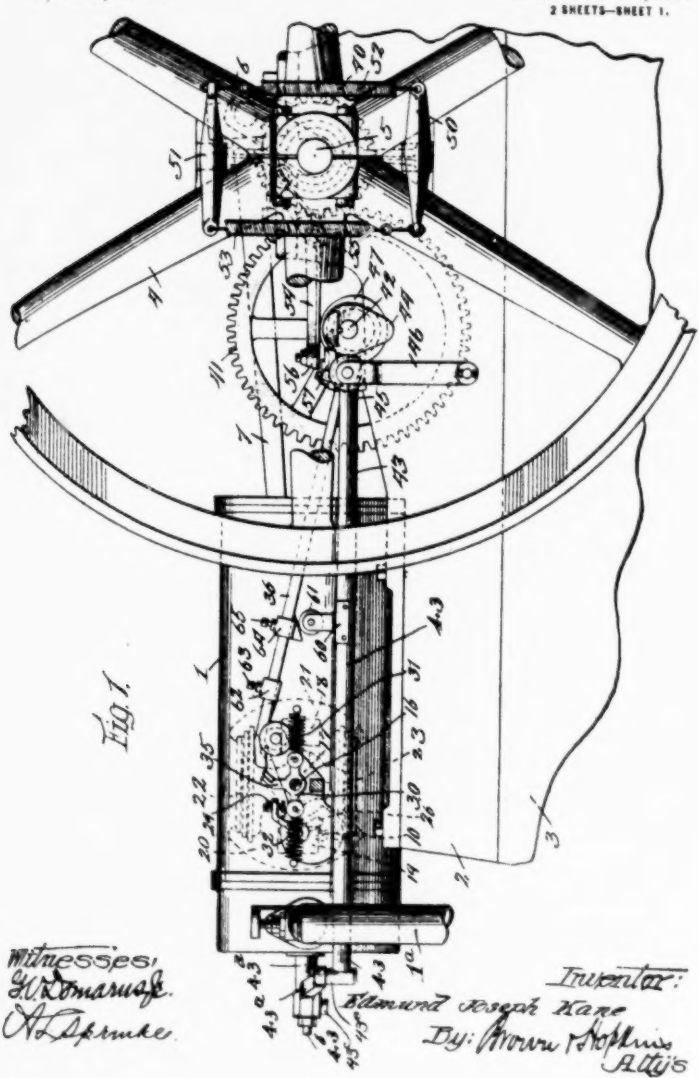


FIG. 1.

Witnesses:
H. Romanoff.
A. Sprinkle.

Inventor:
Edward Joseph Kane
By: Brown Hopkins
Atty's

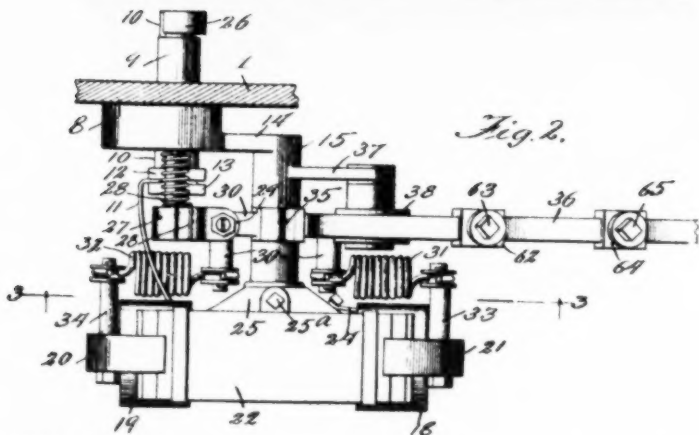
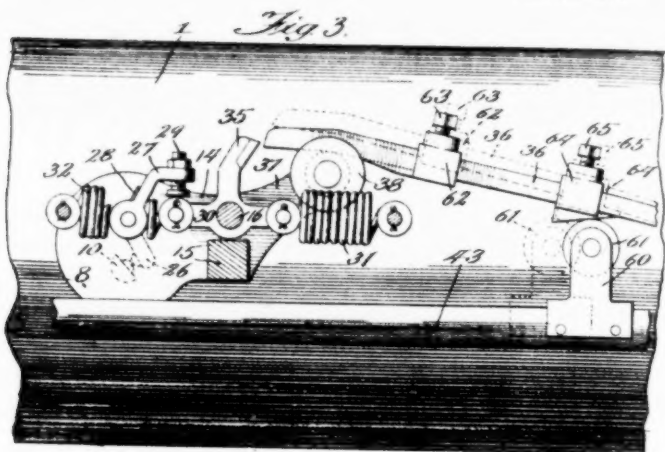
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E. J. KANE.
ELECTRIC IGNITER FOR EXPLOSIVE ENGINES.
APPLICATION FILED FEB. 2, 1910.

1,204,573.

Patented Nov. 14, 1916.
2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

EDMUND JOSEPH KANE, OF CHICAGO, ILLINOIS, ASSIGNOR TO WEBSTER ELECTRIC COMPANY, OF RACINE, WISCONSIN, A CORPORATION OF WEST VIRGINIA.

ELECTRIC IGNITER FOR EXPLOSIVE-ENGINES.

1,204,573.

Specification of Letters Patent.

Patented Nov. 14, 1916.

Application filed February 2, 1910. Serial No. 841,428.

To all whom it may concern:

Be it known that I, EDMUND JOSEPH KANE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Electric Igniters for Explosive-Engines, of which the following is a full, clear, and exact specification.

The invention relates to improvements in electric-igniters for explosive engines.

The object of the invention is to provide an electric igniter mechanism with novel and improved means for producing the spark for firing the charge.

A further object of the invention is to provide in a device of the character described improved means by which when the exhaust valve is held open during the operation of the engine by the speed governor mechanism and no charge in the cylinder is to be exploded, the igniter mechanism is rendered inoperative and consequently the generator consisting of the oscillating or rotating armature or inductor remains idle and a spark is not produced and as a consequence the resulting wear upon the moving parts and the loss of energy required to generate a useless spark is avoided.

A further object of the invention is to provide in a device of the character described, direct and positively operating means for imparting movement to the oscillating armature or inductor, which preferably comprises the movable part of the generator.

To the attainment of these ends and the accomplishment of certain other new and useful objects, as hereinafter described, shown in the accompanying drawings forming a part of the specification, and finally pointed out more specifically in the appended claims, the invention is directed.

In the said drawings, Figure 1 is a side elevation of an explosive engine with the invention attached and having parts of the igniter mechanism shown in section and other parts shown in broken lines in order to more fully disclose the details of construction of the igniter mechanism and one manner of attaching the invention to an explosive engine. Fig. 2 is a detail plan view of the igniter mechanism with the walls of the cylinder of the explosive engine to which it is attached in section. Fig. 3 is an enlarged

detail view of the igniter parts similar to the view in Fig. 1, but showing in dotted lines the relative movements of the exhaust valve operating rod, and the igniter operating means by which the igniter mechanism or generator is rendered inoperative and a spark not produced when no charge is to be exploded in the cylinder because of the action of the speed governor through the exhaust valve operating means on the generator. This view is taken on line 3-3 of Fig. 2.

Similar characters of reference indicate similar parts throughout the several views.

1 is the engine cylinder, and 2 the main frame.

3 is the engine base.

4 is the fly-wheel on shaft 5 provided with a crank 6 operated by connecting rod 7 pivoted to the piston on the interior of the cylinder 1 in the usual or any desired manner.

The engine cylinder 1 is provided with the usual side opening adapted to receive the usual igniter block 8 which is provided with an inner extension 9 fitted through the opening and extending into the cylinder 1. In the horizontal opening through the block 8 extends a stationary electrode 10 which is preferably insulated from the igniter block 8 by suitable insulating material in the usual manner and not herein specifically shown, since it is the common practice to insulate the stationary electrode from the igniter block rather than the movable electrode. Outside the block 8 on the electrode 10 is provided means for the securement to the electrode 10 of the wire 11, such means preferably comprising a threaded outer end on the electrode 10 and the two threaded chamfered or polygonal nuts 12 and 13, between which one end of the wire 11 may be secured.

Secured to the igniter block 8 and preferably cast integral therewith is an arm 14 extending for a short distance approximately parallel with the outer wall of the cylinder 1 and provided at its forward extremity with the angular bearing portion 15 into which the shaft 16, on which is carried the armature or inductor, is journaled. The armature or inductor may be of any desired type as well as the construction of the field of the igniter but the preferred form is an armature or inductor of the form shown only in dotted lines as indicated by the ref-

erence character 17 in Fig. 1 of the drawings, which, although not specifically shown may consist of masses of laminated iron suitably joined together and of approximately the form shown in dotted lines in Fig. 1 and being mounted to oscillate with shaft 16, will, in a well known manner, produce rapid periodic reversals in the magnetic polarity of the cores 18 and 19 indicated in broken lines on Fig. 1 and will in a well known manner set up alternate currents in the coils surrounding them. The wound cores 18, 19 may consist of projections from the laminated iron plates indicated at 20, 21, which at their upper and lower extremities are joined by the magnet plates 22, 23.

While I have herein shown the invention applied to one specific form of generator or magneto and have to an extent shown and described the details of construction of such magneto or generator, it will be apparent that the invention may be applied by those skilled in the art to any type of magneto or generator whether of the oscillating type of armature or inductor or whether of the constantly rotating type of armature or inductor. It will also be apparent that the invention may equally be applied to magnetos or generators for furnishing electrical ignition whether the armature or moving part is of the wound type instead of the laminated metal or whether the field be of the ordinary form of winding.

The laminated cores 18, 19, may be wound in the manner common to this type, one end of the winding indicated by 24 being connected to the supporting block 25 in contact with sleeve 15 and secured thereto by set screw 25^a, which completes the circuit to the bearing block 8 and the movable electrode 26, which is also journaled in bearing block 8 and extends to the outside of the block, being provided at its outer extremity with the crank arm 27 and held normal in such position that the electrodes 10 and 26 are normally in contact with each other by means of the torsion spring 28, one end of which is secured to the igniter block 8 and the other end in engagement with the crank arm 27. The wire 11 already referred to as in contact with electrode 10 leads directly to the wound core 19, thus completing the electrical circuit. To the supporting block 25 is secured the laminated field members 20, 21, which carry the wound cores 18, 19. The end of the crank arm 27 on the movable electrode 26 is provided with an adjustable screw 29 provided with a lock nut and having a head at its lower extremity for engagement with the oscillating member 30, which is secured to rotate with the oscillating shaft 16 carrying the armature or inductor 17. The oscillating member 30 secured to the armature shaft 16 is provided with horizontally extending arms, the ex-

tremities of which are in engagement each with one end of coil springs 31, 32, which have their outer extremities secured to brackets 33, 34, extending laterally from the laminated field members 20, 21. The springs 31, 32 normally exert a tension on the oscillating member 30, thus holding the armature or inductor 17 in its normal position and offering elastic resistance to the rotation of the inductor or armature, which in order to rotate or oscillate must move with the oscillating member 30 through the medium of the armature shaft 16, to which both are secured. The oscillating member 30 is provided with a vertically extending projection or finger as indicated at 35 adapted for engagement by the reciprocating member 36 for the purpose of oscillating the armature or inductor 17 against the tension of springs 31, 32. The extension 15 carried on the igniter block 8 through the connecting portion 14 is provided with an extending branch as indicated at 37, the outer extremity of which carries a grooved roller or sheave 38, which serves as an anti-friction bearing and support for the reciprocating member 36, the free end of which adjacent the grooved roller or sheave 38 is adapted normally to engage the finger 35 to oscillate the armature or inductor. Reciprocating movement is imparted to the member 36 preferably from the crank shaft 5 of the engine, and a convenient way of accomplishing this purpose is to secure to crank shaft 5 a gear as indicated at 40, which meshing with the gear 41, is of suitable size to impart the desired speed to the igniter whatever the character of the engine.

In the present embodiment of the invention, as shown particularly in Fig. 1, the engine is of the single cylinder four-cycle type, the gears 40 and 41 being of proper proportions to impart the desired speed to the shaft 42 and gear 41 for operating the exhaust valve rod, as indicated at 43, which is accomplished by the action of the eccentric cam 44 keyed on shaft 42 and bearing against the anti-friction roller 45 carried at the upper extremity of the pivotal support 46 of the exhaust valve operating rod 43. The igniter operating member 36 may be operated from the shaft 42, which also carries the eccentric cam 44 in any desired manner, a convenient form being indicated in the drawings in Fig. 1 consisting of an eccentric secured to shaft 42 and carrying a strap 47 secured to the forward extremity of the igniter operating member 36.

It is well known in this art that means such as just described may be used for operating the exhaust valve operating rod and it is equally well known in explosive engines that centrifugal governors may be employed on moving parts of the engine in order to control the speed of the engine by

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preventing the closing of the exhaust valve when the engine reaches or exceeds the given speed. In explosive engines of the type herein shown, the piston is employed as a pump for drawing the explosive material into the cylinder but when the exhaust valve of the engine is held open automatically the action of the piston within the cylinder in creating a vacuum will be to cause the air to rush into the cylinder when the exhaust valve is open, following the lines of least resistance, so that a charge will not be drawn into the cylinder when the exhaust valve is open and consequently there will be no explosion take place in the cylinder. Heretofore it has been the practice in the use of igniters to connect them up positively with the engine so that the igniter runs constantly with the engine and a spark is produced at each cycle of operation of the engine whether a charge of explosive has been drawn into the cylinder or not. If, therefore, the engine has reached or exceeded a given speed and the explosion has been cut out by reason of the action of the governor due to the excessive speed, no explosion can take place until the speed has been reduced to or below the given degree and yet the igniter mechanism must continue to operate and the spark is wasted together with the energy necessary to create it and the igniter mechanism has been subjected to the wear incident to such operation for no useful purpose. It is to obviate this condition of useless wear on the igniter mechanism that is one of the special purposes of this invention, as stated, and it is not important what specific means for governing the speed of the engine be employed but the common form of reciprocating exhaust valve operating rod has been shown as commonly operated on four-cycle engines and this is further shown under the control of an ordinary centrifugal governor comprising pivoted weighted members 50, 51, secured to the fly-wheel 4 or the crank shaft 5 of the engine and normally held in a given position by suitable springs 52, 53, which may be adjustable in order to vary their tension in a well known manner not necessary to describe for the purposes of illustrating the present invention. These spring controlled pivoted members 50, 51, may be connected with a suitable member slidably mounted on crank shaft 5, which preferably has an exterior cone shape and against which bears one end of the latch 54 which is pivoted at 55 on the main frame of the engine and has one end, as indicated at 56, adapted to engage with a notched member 57 on the exhaust valve operating rod 43. The usual operation of this form of governor is that, with the springs 52, 53 adjusted to have a given tension when the speed of the crank reaches or exceeds a given speed, the op-

eration of the governor will cause the end 56 of the latch to be depressed so that it will engage the notched member 57 on the exhaust valve operating rod 43 and prevent the return of this rod when released by cam 44 and in this manner hold open the exhaust valve preventing further explosions of the engine because preventing the drawing in of a charge until the speed of the crank shaft falls below the given speed when the spring controlled members 50, 51 on the governor will act to release the exhaust valve operating rod and permit the exhaust valve to close, which will then cause the action of the piston to draw in a charge of explosive for the use of the engine.

It is obvious that even though the reciprocating member 36 which is shown as constantly operating from the crank shaft of the engine shall operate the igniter mechanism, the spark produced will be wasted if the exhaust valve is not closed so that a charge of explosive is provided within the cylinder. It is found by experience that it is very desirable to avoid all the wear and tear possible on the igniter mechanism. In order therefore that the igniter mechanism may be rendered inoperative and consequently no spark produced when there is no charge in the cylinder to be exploded by reason of the exhaust valve being automatically kept open due to the engine having passed a given speed and because of the governor control over the exhaust valve, I provide means for automatically stopping the operation of the igniter mechanism under the control of the exhaust valve operating means. In the present embodiment of the invention the exhaust valve being under the control of the exhaust valve operating rod 43 I secure to the rod 43, in any suitable manner, a support 60 carrying at its upper extremity a suitable anti-friction roller 61. In order that the igniter operating member 36 may be properly timed to release the spring controlled igniter mechanism, the rod 36 is provided with a wedge block 62 adjustably secured thereto by set screw 63. By this means the timing of the igniter mechanism is secured. Another wedge block similar to the block 62 but having its inclined face in the opposite direction is also adjustably secured on the igniter operating member 36, as indicated at 64, and this member is adjustably secured to the member 36 by set screw 65. The operation of the exhaust valve cut out in its relation to the igniter mechanism is best seen from an inspection of the parts depicting the exhaust valve operating rod 43 and the igniter operating member 36 at the extremes of their movements as indicated by the full and dotted lines representing those parts, as shown in Fig. 3.

The operation of the mechanism or as

much thereof as pertains to the features of novelty herein described and claimed is as follows: The operator, desiring to start the engine, may turn the same in the usual manner, thus drawing in the charge of explosive into the cylinder. The operation of starting the engine will also impart movement to the igniter or generator operating member 36 through the gears 40 and 41, the shaft 42 and the eccentric secured thereto which operates the member 36. The movement of the member 36 causes its extremity adjacent the igniter mechanism to engage the upwardly extending arm 35 near its upper extremity and thus rotate the member 30, the shaft 16 and the armature or inductor of the generator carried thereon against the tension of springs 31, 32. This rotation or oscillation of the inductor or armature of the generator will cause a current to be generated which will pass through the electrodes 10 and 26 in the circuit already described. The adjustable wedge block 62 under control of set screw 63 on the igniter operating member 36 may be adjusted so that the forward end of the member 36 will become disengaged from the arm 35 on the oscillating member 30 at the time the current passing through the electrodes 10 and 26 is near its maximum strength. The sudden release of the oscillating member 30 being under the control of the springs 31, 32 will cause it to be returned to normal position, as shown in all of the figures, under considerable momentum which will carry the inductor or armature of the generator, the shaft 16 and the oscillating member 30 beyond the normal position and will cause the extremity of the oscillating member 30 adjacent the crank arm 27 to strike the adjustable screw-threaded member 29. This will rotate the crank arm 27 against the action of spring 28 and will at the same time separate the movable electrode 26 from the stationary electrode 10. The current being at about its maximum strength, as stated, a spark will then pass between the electrodes 10 and 26.

The engine having reached or passed a given speed by reason of which the governor mechanism has locked the exhaust valve operating rod 43 against closing the exhaust valve, the support 60 on the exhaust valve operating rod 43 will be carried to the position indicated in dotted lines in Fig. 3 by which the antifriction roller 61 carried thereby will pass under the adjustable wedge block 64 and operate the igniter operating member 36 to the position indicated in dotted lines also in Fig. 3. In this position it will be seen that although the igniter operating member 36 continues to operate it will be held in a position where its operation will not affect the igniter mechanism or generator which will remain inactive until

the exhaust valve operating rod 43 is returned to normal.

By means of the mechanism as described, it will be seen that the igniter mechanism or generator including the spring controlled oscillating member 30, the armature shaft 16 together with the armature 17 and the movable electrode will all be cut out and remain inactive at all times when the engine is running above normal speed and it is not desired to ignite a charge in the cylinder. It will also be seen that the arrangement of the parts as described for operating the oscillating form of igniter or generator herein shown is exceedingly simple and direct and that by directly operating the oscillating means controlling the armature or inductor through the medium of the reciprocating member 36 I provide an exceedingly simple and durable mechanism that is certain in its operation and not liable to get out of order, and furthermore the movable parts of the igniter being rendered inactive at all times when the exhaust valve is open, there is no useless current generated in the igniter as is the case with the igniters positively operated from the crank shaft of the engine without means for cutting out the operation of the igniter mechanism under the control of the exhaust valve operating means or the speed governor.

In order that the invention might be fully understood the details of the preferred embodiment thereof have been thus specifically described but it is not desired to be limited to the exact details of construction thereof, for it will be apparent that many modifications may be made by those skilled in the art without departing from the purpose and spirit of the invention, and what I claim is—

1. In an explosive engine, the combination with a magneto, of means for operating the magneto by the running of the engine, a speed governor operated by the engine, and means under the control of the speed governor for rendering the magneto operating means inoperative when the engine passes or exceeds a predetermined speed.

2. The combination in an explosive engine having a speed governor, and an exhaust valve operating rod operatively connected with the speed governor, of a magneto, means for operating the magneto by the running of the engine, and means adapted to be operated by the movement of the exhaust valve operating rod for rendering the magneto operating means inoperative.

3. In combination with an internal combustion engine, a speed governor associated with the engine and operatively connected therewith, ignition mechanism for said engine comprising make and break spark electrodes and a magneto, means operated by the engine for effecting the operation of both the magneto and spark electrodes in

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timed relation one to the other, and mechanism controlled by said speed governor for rendering said engine operated means incapable of effecting the operation of the magneto and spark electrodes whenever the engine passes or exceeds a certain predetermined speed.

4. An internal combustion engine of the hit and miss type having an exhaust valve, an exhaust valve operating rod and a speed governor in operative relation to said exhaust valve operating rod arranged to shift the latter to hold the exhaust valve in open position whenever the engine exceeds a certain predetermined speed, in combination with an igniter comprising make and break electrodes, a magneto for supplying ignition current to said igniter, a reciprocating push rod driven by the engine for effecting actuation of the magneto and igniter electrodes together with means operated by the exhaust valve operating rod for rendering the reciprocating push rod incapable of actuating the magneto and igniter electrodes whenever, when the engine exceeds a certain pre-

determined speed, the exhaust valve operating rod and the governor cooperate to hold the exhaust valve in open position, as aforesaid.

5. In combination with an internal combustion engine, a speed governor driven from the engine, ignition mechanism for said engine comprising an igniter and a magneto for supplying ignition current to said igniter, actuating mechanism driven by the engine for effecting the operation of the magneto, and device controlled by the speed governor for rendering said actuating mechanism incapable of effecting the operation of the magneto whenever the engine passes or exceeds a certain predetermined speed.

In testimony whereof I have signed my name to this specification, in the presence of two subscribing witnesses, on this 22nd day of January, A. D. 1910.

EDMUND JOSEPH KANE

Witnesses:

A. L. SPRINKLE,
M. W. CANTRILL.

Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."

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Room No. 63

Address only "The Commissioner of Patents, Washington, D. C."

Letter No. —

Department of the Interior,
 United States Patent Office,
 Washington, D. C., Oct. 20, 1915.

Examiner of Interferences:

An interference is found to exist between the following cases, and in respect to the invention therein specified, to wit:

Cases

1. Name, Edmund Joseph Kane.
 Post-office address, 123 South Waller St., Chicago, Ill.
 Title, Electric Igniters.
 Filed Jan. 14, 1915. Ser. No. 2097. Pat'd — — —,
 No. —. Division of Application No. 541,428, filed Feb. 2, 1910.
 Attorney-, Brown, Nissen & Sprinkle, of 312 So. Dearborn St.,
 Chicago, Ill.
 Associate att'y, — — —, of — — —.
 Assignee, — — —, of — — —.
2. Name, Emil Podlesak.
 Post-office address, Racine, Wis.
 Title, Current-Generator and Igniter for Internal-Combustion En-
 gines.
 Filed Dec. 23, 1914. Ser. No. 878,726. Pat'd — — —,
 Reissued Feb. 9, 1915. No. 13,878. (Original No. 1,055,076, dated
 Mar. 4, 1913, S. No. 690,921.)
 Attorney, Lynn A. Williams, of Monadnock Block, Chicago, Ill.
 Associate att'y, — — —, of — — —.
 Assignee, — — —, of — — —.
- Intf. Number 39,181.
 Intf. Declared Oct. 26, 1915.
 Statements Due Nov. 29, 1915.
3. Name, — — —.
 Post-office address, — — —.
 Title, — — —.
 Filed — — —, Ser. No. —. Pat'd — — —, No. —.
 Attorney, — — —, of — — —.
 Associate att'y, — — —, of — — —.
 Assignee, — — —, of — — —.

Invention

Count 1. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator

having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm and a trip device for actuating the rotor.

Count 2. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

Count 3. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

Count 4. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted, and a trip device for actuating the rotor.

Count 5. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

Count 6. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

Count 7. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

Count 8. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

Count 9. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

The relation of the counts of the interference to the claims of the respective parties is as follows:

| Counts. | Kane. | Podlesak. |
|---------|-------|-----------|
| 1 | 7 | 13 |
| 2 | 8 | 14 |
| 3 | 9 | 15 |
| 4 | 10 | 19 |
| 5 | 11 | 20 |
| 6 | 12 | 21 |
| 7 | 13 | 22 |
| 8 | 14 | 23 |
| 9 | 15 | 24 |

Counts compared.

A. R. Benson, Examiner. A. R. B.

39,181—5

Statement of Podelsak. Filed Nov. 27, 1915. Approved Dec. 17,
1915. F.

In the United States Patent Office
Before the Examiner of Interferences

Interference No. 39,181

KANE

v.

PODELSAK.

Subject-Matter: Current Generator and Igniter for Internal
Combustion Engines

PRELIMINARY STATEMENT OF EMIL PODELSAK

STATE OF ILLINOIS,
County of Cook, ss:

Emil Podlesak, a party to the above-identified interference, being first duly sworn, states:

1. That he first conceived the invention involved in this interference during the last week of November, 1910.

2. That he first made the drawings of this said invention on or about December 15, 1910.

3. That he disclosed this said invention to others on or about December 15, 1910.

4. That he reduced this said invention to practice during February, 1911.

5. That this said invention is in quite extensive use, there being now upwards of seventy thousand (70,000) devices embodying said invention now in use.

6. That he made no applications for Letters Patent of any foreign countries prior to his filing an application (original Ser. No. 690,921, filed April 15, 1912), for Letters Patent of the United States of America.

Emil Podlesak.

Sworn to and subscribed before me this 22nd day of November,
A. D. 1915.

Ellen H. Clegg, Notary Public. [Seal.]

Paper No. 12

Washington, D. C., December 17, 1915.

In re Interference No. 39,181

Interference No. 39,181

PODELSAK

v.

KANE.

Before the Examiner of Interferences

The date of conception of the invention in issue alleged in the preliminary statement of Podelsak, the junior party, being subsequent to the filing date of Kane, the senior party, notice is hereby given that judgment on the record will be rendered against said Podelsak unless he shall within thirty days show good and sufficient cause why such action should not be taken.

The dates of filing and serial numbers of the respective applications are as follows:

Emil Podelsak filed Dec. 23, 1914, Ser. No. 878,726, reissued Feb. 9, 1915, No. 13,878, original patent No. 1,055,076, dated Mar. 4, 1913, Ser. No. 690,921, filed Apr. 15, 1912.

Edmund Joseph Kane filed Jan. 14, 1915, Ser. No. 2,097, division of Ser. No. 541,428, filed Feb. 2, 1910.

H. E. Stauffer, Examiner of Interferences.

File No. 2449

39,181—20

Docket Clerk,
Feb. 1, 1916.
U. S. Patent Office.

In the United States Patent Office

Interference No. 39,181

PODLESAK

vs.

KANE.

MOTION TO DISSOLVE

Now comes Emil Podlesak, the junior party in the above entitled interference, and for cause why judgment should not be entered against him, shows: That the party Kane has no right to make

the claims of the issues, first, because of laches and estoppel; second, because said claims, all of which were taken from the reissued patent of the party Podlesak, when properly construed will not read upon Kane's structure; and third, because the terms of the claims if expanded in meaning in an attempt to read them on the Kane structure, would also read upon devices of the prior art. Upon these grounds, Podlesak moves hereby to dissolve the interference, and further moves that all proceedings be stayed pending the final determination of the questions thus raised.

(1) Kane has no right to make the claims of the issues, because, disregarding the fact that they will not properly read upon his structure, and were drafted to read specifically upon the different Podlesak structure, Kane has been guilty of laches in presenting claims to the subject matter he is now attempting to cover, in that he did not make such claims at his date of filing, February 2, 1910, nor at any time subsequent thereto until April 17, 1915, more than two years after the date of issue of the original Podlesak patent No. 1,055,076, March 4, 1913, and more than two months after the said Podlesak patent had been reissued (February 9, 1915). Kane is estopped to deny that he had notice of the Podlesak invention, and of the use of the same by the Webster Manufacturing Company, Podlesak's assignee, without any adverse claim on Kane's part during the period mentioned, because under date of September 3, 1915, Kane filed a certain petition and under date of September 7, 1915, filed an affidavit, in both of which he alleges facts which constituted such notice to him. The petition and affidavit referred to are papers 7, 9 and 10 in the Kane application file and will be referred to in extenso at the hearing on this motion.

(2) Kane has no right to make claims 1, 2, 3, 4 and 5 of the issues, because he has not two springs, one of which holds the rotor arm and the igniter arm in engagement. These claims which appear as Nos. 13, 14, 15, 19 and 20 in the Podlesak patent, specify spring means holding the rotor in a given position and other spring means operating to hold the rotor arm and the movable electrode arm in engagement. In the reissue patent these springs are marked 23 and 33 respectively, and the spring 33 must be of a definite tension, less than that of the spring 23, but bearing a fixed relation thereto strong enough to hold the arm 32 against the arm 31 of the rotor (Fig. 3), but relatively weak enough so that it will permit the arm 32 to be thrown back by the hammer blow of the arm 31 in operation. In Kane's structure, the springs claimed to correspond to the foregoing are marked 31-32, and 28 respectively. The spring 28 is a torsion spring, and does not bear the same relation to the other springs which is found in the Podlesak patent. In fact, Kane's arms are not normally in contact, and the only function of his torsion spring 28 is to keep his igniter contacts closed until they are opened by the arm on the magneto shaft. The relation of his arms cannot be changed by adjustment without affecting the timing of the spark. By reference to the record it appears that the claims in

question were allowed to Podlesak for his specific structure, which Kane does not disclose.

Kane has no right to make claims 4 to 9 inclusive of the issues, for the following reasons:

Count 4 specifies not only the spring means included in the first three counts, but "an integral bracket upon and in which all of the aforesaid mechanism is mounted." In the Podlesak patent this bracket is a separate element marked 8 and described specifically in lines 24 et seq. of page 2 as "a shelf or bracket 8 which forms a base to which the generator C is removably secured by stud bolts 9." Thus the word "bracket" is used in the Podlesak claims in its proper and normal sense and the element is a separate unitary element not included in or forming a part of the generator or any other element of the combination. Supplementing this, it is pointed out that Podlesak's magneto is complete, with its bearings, shaft, rotor and springs, all assembled and supported as a unit structure, and as such bolted to the bracket or shelf. In the Kane structure on the other hand, there is no "integral bracket" or shelf, as a separate element. Kane's magneto has its shaft bearing directly connected to the base of the spark plug or igniter 8, so that the element of a shelf or bracket is entirely lacking and it cannot be said that Kane has any element "upon and in which all of the aforesaid mechanism is mounted." The "aforesaid mechanism" of Podlesak includes the complete generator unit, and the trip lever and the springs mounted upon and connected therewith. Podlesak's generator can be removed from the bracket or shelf upon which it is mounted, but if any attempt be made to remove Kane's generator, it immediately results in disassembling the entire generator, this generator being directly connected through its shaft bearings with the spark plug.

Count 5 includes not only the springs of diverse strength already referred to, but also "a unitary bracket comprising a body * * * and a shaft extending laterally therefrom and integral therewith upon which the said generator is mounted." The words "unitary bracket" refer to the same part 8 as the "integral bracket" of the preceding count, and the same remarks apply thereto.

Count 6 includes the springs already mentioned, and also "an integral bracket having a body * * * and a shelf laterally extending therefrom and upon which the said generator is mounted." Kane has the element of a body to his igniter, but he has no shelf upon which a generator is mounted, nor has he an integral bracket in any proper sense of the word.

Count 7 includes in addition to the springs as aforesaid, "a supporting shelf or base extending laterally." The element of a shelf or base in this count as in the preceding counts, being properly construed by the Podlesak specification, is entirely lacking from the Kane structure.

Count 8 includes the springs as aforesaid and also includes "a supporting base extending laterally," and "a magneto generator mounted on said base." Kane has no base, and has no magneto generator mounted on a base.

Count 9 includes the springs aforesaid, and also includes "a laterally extending base" and a "magneto generator having a rotor and mounted on said base." Kane has no laterally extending base nor has he a magneto generator mounted on the base.

(3) In construing the counts of the issues of this interference, and in applying them to the structures of the respective parties, the following references are to be considered as showing the state of the art prior to the filing dates of Kane and of Podlesak. These references show that neither Kane nor Podlesak was a pioneer inventor, that claims for their respective structures must be narrowly construed, and that Podlesak's element of a separate base, bracket or shelf, upon which the magneto and associated parts are mounted cannot be construed as identical with a protruding part of the magneto such as Kane's bearing member 15

296,341 Maxim
 357,193 Gavillet et al.
 464,347 Woolley
 480,272 Nichols
 663,643 Simms et al.
 780,221 Packard
 811,122 Bellamy
 820,535 Weber
 862,568 Longenecker
 867,696 Botkowski
 902,499 Le Pontois
 909,264 Wattles
 916,312 Hennig
 938,123 Charter
 943,697 Mueller
 946,816 Bates
 980,537 Leavitt
 990,935 Wattles

British patent 25,148 of 1907 Ashton
 French " 395,438, 1909

Of the foregoing patents, those to Wattles, Bates and Weber are of record. The patents to Woolley, Simms, Packard, Weber, Wattles (2), and Bates, are relied upon to show that it was not original with Kane to put springs on his rotor arm and igniter arm, nor to secure the magneto directly to the igniter or spark plug in one unit, nor to so connect the igniter contacts and the rotor of the magneto that these parts would properly cooperate with suitable timing. The Weber patent 820,535 and the Hennig patent 916,312, both show a plurality of springs, and both of them show the magneto connected to the plug. The Weber patent shows an adjustable anvil screw 27 carried in the lever arm connected to the movable electrode, and the general relation of the parts is the same as in Kane's structure. The Wattles patent 909,264 shows a magneto with a projecting bracket portion of its frame or body secured directly to the base of the plug or igniter.

British patent 25,148 of 1907 shows an arrangement wherein the magneto and igniter are closely associated and connected together so as to operate correctly in unison, but the magneto and the igniter, though thus connected are still independent units. This patent is to be read with the Wattles patent or the Webber patent 820,535, which shows a magneto unit mounted on a support forming the flange or head of the igniter body.

The other patents cited are to be read with the foregoing, and their application is sufficiently evident from the explanation given.

Emil Podlesak, By Edward E. Clement, His
Attorney, Washington, D. C., February 1, 1916.

Intf. No. 39,181, Paper No. 21

Rec. Vol. 118, Page 474

S. E. T.

In the United States Patent Office

Patent Interference No. 39,181

PODLESAK

v.

KANE

MOTION TO DISSOLVE

Order

Electric Lighters

Reissue patent of Emil Podlesak granted February 9, 1915, No. 13,878, on application filed Dec. 23, 1914, original patent granted March 4, 1913, on application filed April 15, 1912.

Application of Edmund J. Kane filed January 14, 1915, No. 2097, division of application filed February 2, 1910.

Mr. H. R. Van Deventer and Mr. Edward E. Clement for Podlesak.

Messrs. Brown, Nissen & Sprinkle for Kane.

The motion to dissolve filed by Podlesak will be set for hearing as to ground 2 thereof, but not as to grounds 1 and 3. The alleged delay in the presentation of the claims by Kane would not constitute ground for dissolving the interference and the party Podlesak being a patentee cannot allege that the claims of the issue should be more narrowly construed than the plain terms would warrant.

Thomas Ewing, Commissioner. February 3, 1916.

Docket Clerk,
Mar. 9, 1916,
U. S. Patent Office.

File No. 2449

39,181—29

In the United States Patent Office

Interference No. 39,181

PODLESAK

VS.

KANE.

BRIEF FOR PODLESAK ON HIS MOTION TO DISSOLVE

This is an interference between the application of Kane, filed in January, 1915, as a division of an older application filed in February, 1910, and patent No. 13,878 of Podlesak, reissued February 9, 1915, the original patent having been numbered 1,055,076, issued March 4, 1913. The issues are claims 13, 14, 15, 19, 20, 21, 22, 23, and 24 of the Podlesak patent which were copied by Kane in an amendment to his divisional application filed January 14, 1915.

The said party Kane is also one of the parties to a copending interference, Milton v. Kane, No. 39,013, where the party Milton has a patent from which Kane copied the claims of the issues. In said interference the two structures of Milton and Kane are identical.

The relation of the three cases thus involved is as follows:

Kane filed his parent application February 2, 1910, and filed the divisional application involved in both the aforesaid interference January 14, 1915.

Milton filed his application October 28, 1910, and his patent was granted May 12, 1914.

Podlesak filed his original application April 15, 1912, his original patent No. 1,055,076 was granted March 4, 1913, and reissued February 9, 1915, with the number 13,878.

October 28, 1910, four months before Kane filed his parent application, the party Milton applied for a British patent, No. 24,833 of 1900, of which a properly certified copy has been filed and made of record in the Milton interference No. 39,013. The structure disclosed and claimed in said British patent and the structure disclosed in the Milton U. S. patent, and the structure disclosed in the Kane application, are all identical, indicating a common origin, and this identity has led to charges of fraud between the parties, which, however, do not involve Podlesak, as his structure is radically different in design and functioning. By reason of the identity of the Kane and Milton structures, any claim which can be read on one of them must read upon the other, and therefore any claims in a later case

which can be read upon Kane, must be anticipated by the Milton British patent.

The Podlesak patent and its reissue were granted by the Patent Office with presumptive knowledge of the said Milton British patent, as well as of the Milton U. S. application, and the Podlesak claims were granted therefore in view of said patent, and without being suggested for interference to Milton, and by virtue of the grant they must be presumed to be valid and not to be anticipated by the patents of the prior art including the Milton British patent aforesaid.

In the interference No. 39,013, Milton v. Kane, Milton, the junior party, has brought a motion to shift the burden of proof, on the ground that he was entitled to the date of his British patent, and said motion has been granted by the Examiner of Interferences, which fact has only been ascertained by your petitioner on the 6th day of March, upon inquiry, he not being a party to the said Milton-Kane interference.

By the decision of the Patent Office in the companion interference, the presumption arises that Milton and not Kane is the first inventor of the single identical structure which is the subject of both their claims; and the burden of proof rests heavily upon Kane to overcome this presumption, dates having been set for taking testimony, in default of which judgment will be entered in favor of Milton.

In the present interference, Kane has no right to make Podlesak's claims, and a motion has been brought by Podlesak to dissolve the interference on that ground, there being set up three sets of facts as supporting said ground; (1) because of laches and estoppel, (2) because the claims do not read upon Kane's structure, and (3) because the forms of the claims if expanded in meaning to read on the Kane structure would also read upon structures of the prior art.

In response to the filing of the motion, the following order was issued by the Commissioner:

"The motion to dissolve filed by Podlesak will be set for hearing as to ground 2 thereof, but not as to grounds 1 and 3. The alleged delay in the presentation of the claims by Kane would not constitute ground for dissolving the interference and the party Podlesak being a patentee cannot allege that the claims of the issue should be more narrowly construed than the plain terms would warrant."

In making the foregoing order, the facts were not before the Commissioner, and especially the fact of the existence and priority of the Milton British patent and the action of the Examiner of Interferences in shifting the burden of proof against Kane and thereby destroying every presumption previously arising in Kane's favor as against anyone else, and substituting a strong presumption against him.

Kane made no claims whatsoever to the subject matter of the present interference, for nearly five years after the publication in June, 1910, of the Milton British patent above mentioned; and for more than two years after the Podlesak original patent No. 1,055,076 had been issued; and more than four years after Milton had filed his application upon which his patent No. 1,096,048 involved in the

said interference No. 39,013, was granted to him; and more than four months after the said grant. And your petitioner shows that during the whole of the elapsed time from February 2, 1910, when Kane filed his parent application, until April 17, 1915, after he filed his divisional application, he claimed only matters foreign to the present interference, and prosecuted his application to a final rejection, as your petitioner is informed and believes; and that it was not until after thus failing to secure any claims on what he had alleged to be his invention for nearly five years, that he filed a divisional application and copied claims taken from your petitioner's patent.

The question of estoppel is raised only incidentally because of the notice to Kane by publication of the several patents, British and American, of Milton and Podlesak, that they were claiming the same structures, his delay raising a presumption of acquiescence on his part which he should now be estopped to deny. As estoppel is a ground for judgment and not for dissolution, it need not be further considered here.

Kane should be held estopped, however, to raise the question of the patentability of the claims to Podlesak, while claiming them himself, since Podlesak has a patent already, and especially since Podlesak's original patent was issued more than two years before Kane ever copied the claims.

The fact of delay in making the claims brings Kane squarely under the decision in

Shreeve v. Grissinger, 202 O. G., 951.

and every doubt in the case must be resolved against him.

Kane has no right to make claims 1, 2, 3, 4 and 5 of the issue because his disclosure does not show or describe a spring means operating on the igniter arm to hold it in engagement with the rotor arm. The spring 28 of Kane does not operate on the igniter arm to hold it in engagement with the rotor arm 30 but, as illustrated in Figures 2 and 3 and described on page 3, lines 11 to 14 of Kane's original disclosure, is "a torsion spring" mounted "in a manner to cause contacts 26 and 10 to normally remain in contact," and neither the drawings nor the description of Kane's original disclosure show the anvil 29 in contact with the rotor arm 30, but to the contrary, the original disclosure specifically states, on page 3, lines 27 to 29, that "the tension springs 31 and 32 normally maintain the arm member 30 in a position so that one of its arm is close to the anvil 23," and again, on page 4, lines 12 to 14, that "Owing to the elasticity of springs 31 and 32 and the momentum of member 30, the latter will be carried slightly past its normal position, and engage anvil 29," which indicates clearly that it was not intended that the anvil 29 should normally engage the member 30. Thus Kane, who specifically shows and describes a spring means operating to hold the igniter contacts normally closed and the anvil 29 close to the arm 30 cannot claim the same means as "spring means * * * operating on the first-mentioned arm (igniter arm 27) to hold the same in engagement with the second-mentioned arm (rotor arm 30). This normal engagement of the two arms mentioned is clearly shown in the

Podlesak drawings and the terms of claim 1 are specifically descriptive of this showing. Further, the party Kane's structure so closely resembles the structure disclosed in the aforesaid British patent to Milton, No. 24,838 of 1909, that any construction put upon the terms of the issues to make them read on the one would make them read on the other. Other patents disclosing the use of two springs, a strong spring for operating the rotor and a weaker spring for the igniter contacts, are Weber, 829,555, May 15, 1906; Warden, 900,935, May 2, 1911, and Podlesak, 1,024,418, April 25, 1902, the patent to Wattle being a reference of record in the original Podlesak patent No. 1,055,076.

Kane has no right to make claim 2 of the same because, in addition to the above reasons, the function of the "means for adjusting the relation of the arms" disclosed by Kane is just the same as that which he claims in claim 2. Kane, in his original disclosure, on page 3, lines 15 to 17, says, "The arm 29 is adjustably mounted on the free end of arm 27 so that timing of the engine may be varied slightly by such adjustments" while claim 2 of the same calls for "means on one of said arms for adjusting the relation of the rotor and thereby the relation of the movable electrode to the rotor." The purpose of the adjustment described in that claim is to vary the timing of the spark in relation to the advanced position of the magneto, which has nothing to do with the timing of the spark in relation to the cycle of the engine. This will be clear when it is noted that the electrical cycle of the magneto on the engine speed is constant regardless of variations in the speed of the engine.

Kane has no right to make claim 4 of the same for the reasons given in regard to the first three claims, and also because his original disclosure does not show "an integral bracket upon and on which all of the aforesaid mechanism is mounted." In the Podlesak patent this bracket is a separate element marked α and described separately in lines 24 et seq., of page 2 as "a shaft or bracket α which forms a base to which the generator C is removably secured by such bolts B." Thus the word "bracket" is used in the Podlesak claims in its proper and normal sense and the element is a separate unitary element not included in or forming a part of the generator or any other element of the combination. Supplementing this, it is pointed out that Podlesak's magneto is complete, with its bearings, shaft, rotor and springs, all assembled and supported as a unit structure, and as such, bolted to the bracket or shaft. In the Kane structure, on the other hand, there is no "integral bracket" or shaft as a separate element. It cannot be construed to read on the disclosure of Kane without meaning the same thing as separate element. When mentioned Kane's magneto is described in the paragraph beginning with line 9 on page 2 of his original disclosure, which reads: "The bracket α on arm 14 having a bearing member 15 at its inner end, the supporting member is journaled a shaft 16, which carries the commutator inductor 17. The inductor 17 rotates between the pole pieces 18 and 19. The cores 18 and 19 are provided with winding, alternating windings and formed on the pole pieces 20 and 21, and the latter are joined by fixed magnets 22 and 23. The pole pieces 20 and 21 are carried on an extension 25 formed on the bearing member 15."

Nowhere in Kane's original disclosure does he refer to the member 15 as other than a "bearing member," and which is certainly a part of the magneto generator such as could only be designated by the term "a generator having a rotor," in claim 4 of the issue. Kane's magneto has its shaft bearing directly connected to the base of the spark plug or igniter 8, so that the element of a shelf or bracket is entirely lacking and it cannot be said that Kane has any element "upon and in which all of the aforesaid mechanism is mounted." The "aforesaid mechanism" of Podlesak includes the complete generator unit, and the trip lever and the springs mounted upon and connected therewith. Podlesak's generator can be removed from the bracket or shelf upon which it is mounted, but if any attempt be made to remove Kane's generator, it immediately results in disassembling the entire generator, this generator being directly connected through its shaft bearings with the spark plug.

Kane has no right to make claim 5 of the issues for the reasons given in regard to the first three claims, and also because the "unitary bracket" refers to the same part as the "integral bracket" of claim 4, the argument to count 4 therefore applying, and further because Kane discloses no "unitary bracket comprising a body * * * and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted." Kane, who in his original disclosure shows and describes the member 15 as a "bearing member," in which is "journaled a shaft 16 which carries the armature of the inductor," and which is therefore a part of the magneto, cannot claim it as a "shelf" for supporting the magneto, as the terms "shelf" and "magneto" in the counts designate different elements.

Kane has no right to make claim 6 of the issues because *because* this includes the "spring means" already referred to, and also an "integral bracket having a body * * * and a shelf laterally extending therefrom and upon which the said generator is mounted." While Kane has the element of a body to his igniter he has no shelf and the term "shelf" cannot be construed to indicate the bearing member 15 forming a part of the element designated by a former term, in the same count, "a generator having a rotor."

Kane has no right to make claims 7, 8 and 9 for reasons above given, and further because count 7 includes in addition to the springs as aforesaid, "a supporting shelf or base extending laterally." The elements of a shelf or base in this count as in the preceding counts, being properly construed by the Podlesak specification, is entirely lacking from the Kane structure.

Count 8 includes the springs as aforesaid and also includes "a supporting base extending laterally," and "a magneto generator mounted on said base." Kane has no base, and has no magneto generator mounted on a base.

Count 9 includes the springs aforesaid, and also includes "a laterally extending base" and a "magneto generator having a rotor and mounted on said base." Kane has no laterally extending base, nor has he a magneto generator mounted on the base.

All the issues must be construed in the light of the disclosure in Podlesak's patent, from which they were taken, and their language must be given its ordinary and unstrained meaning, when read upon his structure, and cannot be in the slightest degree distorted, strained, or expanded to read on a different structure, such as that of Kane, or Milton.

Wilson and Forrest v. Ellis, 211 O. C., 286.

Sinclair v. Engel, 147 O. C., 769.

Curtis v. De Ferranti v. Lindmark, 171 O. C., 215.

General Electric Co. et al., v. Steinberger, 205 O. C., 1101.

Since no claim in this interference can be read on the Kane structure without also reading on the Milton structure shown in the British patent, any adverse decision at the present time in the present interference would have the sole effect of holding the claims of Podlesak's patent No. 13,878 invalid, in view of the Milton British patent, without awarding them to either Kane or Milton. Priority cannot be awarded to Kane for the reasons above stated, nor to Milton because he is not a party to this interference, he already has a patent, and has not attempted to make Podlesak's claims.

The question of validity of Podlesak's claims cannot be raised by either party hereto under present practice.

Emil Podlesak, By Edward E. Clement, His Attorney.

Hearing: March 9, 1916

39,181—32.

S. E. T.

In the United States Patent Office

Patent Interference No. 39,181

PODLESAK

v.

KANE.

Electric Lighters

MOTION TO DISSOLVE

Reissue Patent of Emil Podlesak Granted February 9, 1915, No. 13,878, on Application Filed December 23, 1914; Original Patent Granted March 4, 1913, No. 1,055,076, on Application Filed April 15, 1912.

Application of Edmund J. Kane Filed January 14, 1915, No. 2097.
Division of Application Filed February 2, 1910.

Mr. H. R. Van Deventer and Mr. Edward E. Clement for Podlesak.
Messrs. Brown, Nissen & Sprinkle for Kane.

Podlesak moves to dissolve the interference and ground 2 of the motion alone has been set down for hearing. This ground alleges that Kane has no right to make the claims corresponding to the issue counts.

The counts are:

1. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first mentioned means and operating on the first mentioned arm to hold the same in engagement with the second-mentioned arm, and a trip device for actuating the rotor.

2. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means and operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, a trip device for actuating the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

3. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, and spring means operatively connected with the rotor for holding the same in a predetermined position.

4. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first mentioned arm to hold the same in engagement with the second-mentioned arm, an integral bracket upon and in which all of the aforesaid mechanism is mounted and a trip device for actuating the rotor.

5. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and therefore the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor.

6. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm on the rotor, a trip finger on the rotor, a push rod for operating the trip finger, a spring tending to hold the arm of the electrode into engagement with the arm of the rotor, spring means operatively connected with the rotor for holding the same in a predetermined position, and an integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted.

7. The combination of an igniter frame, comprising a body having relatively fixed and movable electrodes mounted therein, a supporting shelf or base extending laterally therefrom and integral therewith; an electric current generator comprising field magnet and a rotor, mounted on said base; spring means for holding the rotor in a predetermined position; an arm on the rotor; an arm on said movable electrode adapted to engage with the first-mentioned arm; spring means for bringing said two arms into engagement; and a trip finger on the rotor.

8. The combination of an igniter frame comprising a body having relatively fixed and movable electrodes mounted therein, a supporting base extending laterally therefrom and integral therewith, with an internal combustion motor, a magneto generator mounted on said base and having a rotor, spring means tending to hold the rotor in a predetermined position, an arm on the rotor, an

arm on said movable electrode adapted to engage with the first-mentioned arm, spring means for bringing the first-mentioned arm into engagement with the second-mentioned arm, a trip finger on the rotor, and means operable by said motor for actuating the trip finger.

9. The combination of an igniter frame, comprising a body and a laterally extending base, with an internal combustion motor, a magneto generator having a rotor and mounted on said base, spring means tending to hold the rotor in a predetermined position, a trip finger on the rotor, a reciprocatory push rod driven by the motor for actuating the trip finger, a fixed electrode and a movable electrode mounted in the body and adapted to make and break contact with each other within the combustion chamber of the motor, an arm on the rotor, an arm on the movable electrode adapted to engage with the arm of the rotor, spring means for bringing the arm of the movable electrode into engagement with the arm of the rotor, and means on one of said arms for adjusting the relation of the arms and thereby the relation of the position of the movable electrode to the rotor.

Podlesak is a patentee and the counts are claims taken from his patent. The invention relates to igniters for internal combustion engines of the make and break type. In the Podlesak patent the electrodes are designated 3 and 4, respectively, 3 being the fixed and 4 the movable electrode. The electrodes are normally separated and are mounted in a cylindrical body 1 passing through an opening in the wall of the cylinder. The outer end of the body 1 is formed with a plate 5 by means of which the body is fastened to the cylinder. Extending from the portion 5 is a shelf, bracket or base to which the generator is secured. The rotor 20 of the generator is mounted on a shaft 21 and this shaft has at one end oppositely extending arms 22 to which are connected alining springs 23. At the opposite end of shaft 21 there are arms 25, 31. Arm 25 is engaged by the free end of a push rod 26 and arm 31 is normally engaged by an arm 32 on the outer end of the movable electrode. 33 is a spring of less strength than springs 23 which causes or tends to cause the engagement of arm 32 with arm 31. The engagement of arms 31 and 32 is made through an adjustable contact screw 35 on the latter arm. Push rod 26 is actuated from the engine and after rocking shaft 21 through arm or trip finger 25 the rod slips off the trip finger and shaft 21 and rotor 20 carried thereby are snapped back to and beyond their normal position by springs 23. On the return movement of the shaft, arm 31 strikes arm 32 on the movable electrode a hammer blow effecting a quick separation of the electrodes which had been previously brought together.

In the Kane construction 10 and 26 designate the fixed and movable electrodes, respectively, of the igniting device. 8 is a block or body having an arm 14 provided with a bearing member 15 in which is journaled the shaft 16 of the rotor. This shaft has oppositely extending arms 30, 30, to which are connected relatively strong alining springs 31, 32. Shaft 16 is also provided with an arm or trip finger 35 acted upon by a reciprocating rod 36, 62 actu-

ated from the engine. The shaft 26 is connected to the movable electrode and is acted on by a spring 28 of less strength than springs 31, 32. Shaft 26 is provided with an arm 27 having at its free end an anvil in the form of a screw threaded member 29 which can be adjusted in its relation to one of the arms 30 on the rotor shaft. As shown the anvil does not contact with arm 30 and the electrodes are normally in contact. The spring 28 on shaft 26 of the movable electrode tends to bring the arm 27 or the anvil carried thereby into engagement with arm 30 on the rotor shaft. When rod 36, 62, is reciprocated the rotor is rocked through the rod acting on arm 35. When the rod slips off the arm the rotor is returned to and beyond normal position by springs 31, 32, the anvil being struck a hammer blow by one of the arms 30, causing a separation of the electrodes.

All of the counts include in one form or another the relatively fixed and movable electrode, an arm on the movable electrode, an arm on the rotor, spring means holding or tending to hold the rotor in a given position and a spring or spring means holding or tending to hold the arm of the movable electrode in engagement with the arm on the rotor. Some of the counts specify that the spring or spring means acting on the movable electrode arm is of less tension than the other spring or spring means.

It is the moving party's contention that the party Kane does not disclose the element stated in count 1 as "spring means of less tension than the first mentioned means and operating on the first mentioned arm to hold the same in engagement with the second mentioned arm." The first mentioned arm is the arm on the movable electrode and the second mentioned arm is the arm on the rotor with which it co-operates. As originally shown and described the anvil 29 in the arm 27 of the Kane construction is not normally held in engagement with the arm 30 on the rotor shaft.

Kane answers the contention of the moving party with respect to the limitation under consideration in two ways. First, that the anvil 29, being shown and described as adjustable, may be so adjusted in the arm 27 that the spring 28 will hold the anvil in engagement with arm 30 on the rotor shaft in the normal position of the parts. Second, that the counts are not limited to a construction in which the spring of less tension shall hold the arms in engagement when the parts are stationary or in normal position. Thus, Kane points out that with the parts of his device adjusted as shown in the drawing when the rotor shaft has been rocked from normal position by rod 36, 62, and released, springs 31, 32, will return the rotor shaft to or beyond normal position in which position spring 28 which is of less tension than springs 31, 32, will operate on arm 27 to hold it or the anvil carried thereby in engagement with arm 30 on the rotor.

It seems to the law examiner that the position of Kane with respect to count 1 is correct. This count covers the Kane construction if the anvil 29 be adjusted in the arm 27 so as to bear on the arm 30 of the rotor shaft. The anvil was originally described as adjustable and is clearly adjustable to an extent sufficient to cause it to

contact with arm 30. Spring 28 tends to move arm 27 in a direction to cause engagement of the anvil with arm 30 and such engagement would be effected if anvil 29 were adjusted in the manner stated by Kane in the amendment to his specification under date of October 18, 1915. The adjustable anvil 29 of Kane corresponds to the screw 35 of Podlesak. Kane has shown his anvil adjusted so as to be normally out of contact with the arm on the rotor shaft, although obviously the anvil can be adjusted so as to be in engagement with the arm on the rotor. Podlesak shows the screw 35 adjusted so as to normally contact with arm 31 on the rotor, but clearly the screw could be so adjusted as to be out of contact with the arm. Two patents certainly ought not to issue showing a part having the same capabilities of adjustment and based on the distinction that one shows the part adjusted into one position, while the other shows the part adjusted into a different position. It should be noted that count 1 does not state that the electrodes are normally separated. However, it is apparent that Kane's anvil 29 can be so adjusted as to cause the electrodes to be normally separated.

The remaining counts with the exception of counts 3 and 6 contain limitations with respect to the relation and action of the springs generally similar to count 1. The holding of the law examiner with respect to the spring feature of these claims must be the same as that stated in the consideration of count 1.

Count 3 seems to read directly on the Kane device without qualification. The members 10 and 26 are the relatively fixed and movable electrodes, 27 is the arm on the movable electrode, while 30 is the arm on the rotor of the generator, and 35 is the trip finger. The push rod is 36, 62. 28 is a spring tending to hold the arm 27 in engagement with the arm 30 of the rotor, while the springs 31, 32, constitute spring means operatively connected with the rotor for holding it in a predetermined position. It seems clear that the Kane construction with the anvil adjusted as shown responds fully to count 3 since the count does not state that the spring actually holds the one arm in engagement with the other.

Count 6 so far as the spring acting on the arm of the movable electrode is concerned is limited in the same manner as count 3. So far as the spring feature is concerned Kane can make count 6 based on the adjustment of the anvil just as shown in his drawing and described in his original specification.

Counts 4 to 9, inclusive, include in addition to the limitation heretofore referred to, a bracket which is variously described in the counts as an integral bracket, a unitary bracket, an integral bracket having a body and shelf laterally extending laterally therefrom, a body and a supporting shelf or base extending laterally therefrom. In the Podlesak construction the limitations in question refer to the body 1 with the plate 5 from which extends laterally the shelf or base 8. It is Podlesak's contention that the parts 8, 14 and 15 of the Kane device do not fairly respond to the limitations in counts 4 to 9, inclusive, with respect to the integral or unitary bracket and the base or shelf on which certain parts are supported.

Obviously, the parts 8, 14 and 15 constitute an integral and unitary structure. They also support the parts of the apparatus as stated in the counts. There is no limitation in the counts as to the character of the shelf or base other than that it shall extend laterally from the body and shall support certain parts. It seems to the law examiner that the parts 14, 15, of Kane respond to the limitation to a laterally extending base or shelf in substantially the same sense as do the parts 5 and 8 in the Podlesak device. Further, it is thought that Kane's member 8 corresponds, so far as the counts state, fairly to member 1 of Podlesak which is understood to be the body of certain of the counts.

It must be held that Kane has a right to make claims corresponding to the counts and the motion for dissolution is accordingly denied.

E. S. Henry, Law Examiner. March 22, 1916.

Paper No. 34

Washington, D. C., March 24, 1916.

Before the Examiner of Interferences

In re Interference No. 39,181

PODLESAK

VS.

KANE

The law examiner having denied Podlesak's motion to dissolve, filed February 1, 1916, proceedings are resumed, and Podlesak, the junior party, having failed to show sufficient cause why judgment on the record should not be entered against him, pursuant to the order of December 17, 1915, priority of invention of the subject matter in issue is hereby rendered in favor of Edmund Joseph Kane, the senior party.

Limit of appeal: April 13, 1916.

H. E. Stauffer, Examiner of Interferences.

1074

File No. 2449

Docket Room,
Apr. 5, 1916,
U. S. Patent Office.

Mail Room,
Apr. 5, 1916,
U. S. Patent Office.

Intf. No. 39,181, Paper No. 35

In the United States Patent Office

Interference No. 39,181

PODLESAK

VS.

KANE

APPEAL TO THE BOARD OF EXAMINERS IN CHIEF

To the Commissioner of Patents,

SIR: I hereby appeal to the Board of Examiners in Chief from the decision of the Examiner of Interferences in the above entitled case, dated March 24, 1916, in which priority of invention was awarded to Kane. The following are assigned as reasons for appeal:

(1) The Examiner erred in finding that Podlesak, the junior party, had failed to show sufficient cause why judgment on the record should not be entered against him.

(2) The Examiner erred in awarding priority to Kane on the claims of the issues.

(3) The Examiner erred in not finding that Podlesak was entitled to judgment of priority on the claims of the issues.

(4) The Examiner erred in deciding the Kane has a right to make the claims of the issues, and in entering judgment based thereon.

Signed at Washington, D. C., this 5th day of April, 1916.

Emil Podlesak, By Edward E. Clement, His
Attorney.

Examiner-in-Chief,
Apr. 25, 1916,
U. S. Patent Office,

Appeal No. 9807, Paper No. 41

United States Patent Office

Before the Honorable Board of Examiners-in-Chief

Interference No. 39,181

EDMUND JOSEPH KANE

vs.

EMIL PODLESAK.

MOTION

And now comes the party Kane, by his attorneys, and moves that the Honorable Board of Examiners-in-Chief re-set for hearing on the earliest possible day the appeal by Podlesak from the judgment of the Examiner-of-Interferences awarding priority of invention to the party Kane, which appeal is now set for hearing by the Board of Examiners-in-Chief on May 26, 1916.

Brown, Nissen & Sprinkle, Attorneys for
Kane.

Examiner-in-Chief,
Apr. 25, 1916,
U. S. Patent Office,

United States Patent Office

Before the Honorable Board of Examiners-in-Chief

Interference No. 39,181

EDMUND JOSEPH KANE

vs.

EMIL PODLESAK.

AFFIDAVIT OF LYNN A. WILLIAMS

STATE OF ILLINOIS,

County of Cook, ss:

Lynn A. Williams, being duly sworn, says:

I am, and for some years past have been, Counsel for The Webster Electric Company engaged at Racine, Wisconsin, in the manufacture and sale of ignition apparatus. The Webster Electric Company has

recently, by assignment, acquired the whole right, title, and interest to the Kane application involved in this interference, and also has certain rights in, to, and under the Podlesak reissue patent No. 13,878 involved in this interference, and also other Podlesak patents and applications, which rights were acquired by two written instruments executed February 5, 1914, and recorded respectively February 17, 1914, and September 29, 1915. The rights of the Webster Electric Company include the right to institute and maintain suit for infringement of patent No. 13,878 and said other patents and applications.

On or about September 4, 1915, Emil and Henry J. Podlesak, by an instrument in writing, attempted and purported to assign patent No. 13,878 and said other patents and applications to Splitdorf Electrical Company and Sumter Electrical Company, the plant of the Sumter Electrical Company at Sumter South Carolina, now being owned by Splitdorf Electrical Company and operated as its South Carolina works. Since said attempted and purported assignment Webster Electric Company and its Counsel have been refused and denied any authority to control or take any action in the Patent Office with respect to patent No. 13,878 or said other patents and applications.

This interference involves the Podlesak reissue patent previously referred to and a pending application of the party Kane. The issue of the interference consists of a number of the broader claims of the Podlesak reissue patent. Kane's application involved in this interference is divisional of an earlier Kane application filed on February 2, 1910. Podlesak in his preliminary statement alleged a date of conception subsequent to February 2, 1910, and was, therefore, required to show cause why judgment on the record should not be rendered against him. In an attempt to avoid judgment on the record Podlesak, on the last day of the time afforded by the rules as extended by stipulation, filed a Motion to Dissolve the interference upon three counts. The Examiner of Interferences and his Honor, Commissioner Ewing, denied to Podlesak the right to urge grounds 1 and 3 of his Motion to Dissolve. In due course the remaining ground of the Motion was argued before the Law Examiner and decided adversely to Podlesak. In accordance with the usual practice the jurisdiction of the interference was then re-assumed by the Examiner of Interferences and final judgment against Podlesak was rendered by the Examiner of Interferences. From this judgment Podlesak has taken an appeal to the Board of Examiners in Chief and we believe that it is the intent of Podlesak and the Splitdorf interests to prosecute a series of appeals pro forma or perfunctory in their nature and for the mere purpose of delaying the termination of this interference and the issue of a patent on the Kane application.

Webster Electric Company prior to the purported assignment to Splitdorf Electrical Company and Sumter Electrical Company instituted suit for infringement of its rights under patent No. 13,878 in interference against the Sumter Electrical Company in the United States District Court for the Eastern District of South Carolina in

which suit Emil and Henry J. Podlesak were co-plaintiffs. For divers reasons said suit was dismissed without prejudice on or about September 23, 1915.

In October 1915 Webster Electric Company instituted suit in the United States District Court for the Northern District of Illinois, Eastern Division, for infringement of said patent No. 13,878 and others against Splitdorf Electrical Company, Sumter Electrical Company, Henry J. Podlesak, and Emil Podlesak. Said suit is pending and ready for trial.

There is also pending and ready for trial in the United States District Court for the Eastern District of Michigan, a suit for infringement of said patent No. 13,878 in which the Webster Electric Company, Emil T. Podlesak, and Henry J. Podlesak are plaintiffs, and in which Alamo Manufacturing Company is defendant. Subsequent to said purported assignment of September 4, 1915, defendant brought a motion to have the Splitdorf Electrical Company and Sumter Electrical Company made parties plaintiff, or that the bill be dismissed, and extrajudicial the Splitdorf Electrical Company and the Sumter Electrical Company have demanded of the Webster Electric Company that it dismiss said suit.

Webster Electric Company, therefore, has pending two suits for infringement of its rights in, to, and under the Podlesak patent No. 13,878 in interference, which suits are ready for trial and may be set for hearing at any time. It also owns the Kane application in interference. It is impossible for Webster Electric Company to consistently proceed with the trial of said two suits if, as we believe the fact to be, Kane is ultimately to be awarded priority in this interference and a patent is issued on its Kane application. It is, therefore, essential that this interference be determined before said suits can proceed so that Webster Electric Company shall know whether the invention in issue in this interference is validly patentable to Kane or whether it is validly patented to Podlesak by patent 13,878 in, to, and under which Webster Electric Company is the owner of said certain rights including the right to institute and maintain suits for infringement.

It is obvious that Splitdorf Electrical Company and the Podlesak who are confederating together will have to actively defend the pending suit at Chicago if the Podlesak reissue patent is validated by an award of priority to Podlesak in this interference, whereas they will have to actively defend a suit to be instituted at once if Kane is awarded priority and his application issues as a patent. While this interference is untermiated the Webster Electric Company is practically unable to proceed against the infringement by Splitdorf Electrical Company, contributed to by the Podlesaks, because it does not know whether the invention being appropriated is an infringement of its rights under a valid patent to Podlesak or under a valid patent to be issued to Kane. As long as this uncertain state of affairs can be maintained Splitdorf Electrical Company and the Podlesaks will be able to defy Webster Electrical Company and we believe it is their unequitable purpose to maintain this uncertain

status by a series of appeals in this interference, taken with the primary intent and purpose of merely delaying the ultimate issuance of the Kane patent.

For these reasons Webster Electric Company and its Counsel believe that it is essential to its rights that the hearing of this appeal be advanced to as early a date as possible.

Lynn A. Williams

Subscribed and sworn to before me this 22nd day of April, A. D. 1916.

Albert G. McCaleb, Notary Public. (Seal)

Appeal No. 9807, Paper No. 43

J. R. S.

Appeal No. 9807

United States Patent Office

April 26, 1916.

Before the Examiners-in-Chief, on Appeal

In the Matter of the Interference Between the Reissue Patent of Emil Podlesak, Granted February 9, 1915, No. 13,878, on Application Filed December 23, 1914; Original Patent Granted March 4, 1913, No. 1,055,076, on Application Filed April 15, 1912, and the Application of Edmund J. Kane, Filed January 14, 1915, No. 2097, which is a Division of Application Filed February 2, 1910, Serial No. 541,428. Interference No. 39,181.

Improvement in Electric Lighters

Mr. H. R. Van Deventer and Messrs. Sturtevant & Mason, attorneys for Podlesak.

Messrs. Brown, Nissen & Sprinkle, attorneys for Kane.

The request for advancing the hearing in this case is denied.

T. G. Steward, Frank C. Skinner, Fairfax Bayard, Examiners-in-Chief.

Examiner-in-Chief,
U. S. Patent Office,
May 16, 1916.

Appeal No. 9807, Paper No. 46

BRIEF

In the United States Patent Office

Before the Board of Examiners-in-Chief

Interference No. 39,181.

EMIL PODLESAK

vs.

EDMUND JOSEPH KANE,

Electric Igniters

Hearing on Priority

BRIEF FOR EMIL PODLESAK

H. R. Van Deventer, Sturtevant & Mason, Attorneys.

In the United States Patent Office

Interference No. 39,181

PODLESAK

vs.

KANE,

Electric Igniters

Hearing on Priority

This case comes before your Honors on appeal by Podlesak, the junior party to this interference, from the decision of the Examiner of Interferences, awarding priority of invention to Kane.

Podlesak failed to overcome the filing date of the senior party, Kane, and was called upon to show cause why judgment of priority should not be rendered against him. Motion to dissolve was brought alleging that Kane, the senior party, had no right to make claims corresponding to the counts of the interference. This motion was duly heard by the Law Examiner who decided that Kane had a right to make the claims corresponding to the counts of the inter-

ference. The Examiner then awarded priority of invention to Kane and Podlesak has appealed from that decision.

The questions before your Honors are:

First. Whether or not Kane is not estopped from making claims corresponding to the counts of the interference by reason of his laches in presenting the claims in his application and provoking the interference.

Second. Whether or not Kane has actually disclosed in his application, as originally filed, subject-matter on which claims may be based, corresponding to the counts of the interference.

The question of whether there has an estoppel grown up against Kane's making claims corresponding to the counts of the interference will be first considered.

The records show the following facts:

Podlesak filed his application for patent April 15, 1912, and this resulted in the grant of a patent to him on March 4, 1913, No. 1,055,076. Count 1 of the present interference is identical with Claim 13 of the original Podlesak patent. Counts 2 and 3 of the present interference are substantially identical with Claims 14 and 15 of the original Podlesak patent. On December 23, 1914, an application for reissue of the Podlesak patent above referred to was filed and this resulted in the grant of a reissued patent to Podlesak February 9, 1915, No. 13,878. It is significant that the attorney for Kane and the Webster Electric Company (assignee of Kane) in this case was the attorney for the Podlesak reissue application.

Counts 4 to 9 inclusive correspond, respectively, with Claims 19 to 24 inclusive of the Podlesak reissued patent.

Edmund J. Kane filed an application in the Patent Office February 2, 1910. On February 14, 1915, the application in this interference, Serial No. 2097, was filed and was alleged to be a division of this earlier application, filed February 2, 1910. Kane, in his divisional application, Serial No. 2097, as originally filed, did not present any claims to the subject-matter involved in this interference. Neither were there any claims presented at any time in the application filed February 2, 1910, which embraced the subject-matter forming the counts of this interference.

On April 17, 1915, Kane filed an amendment in his application, Serial No. 2097, presenting Claims 7 to 15 of the application, which claims are respectively the issues of the present interference. These claims were made for the first time by Kane in his application more than two years after the grant of the original letters patent to Podlesak, which was March 4, 1913.

The counts of the interference may be divided into two groups. Group 1 includes Counts 1, 2 and 3, which were substantially identical with Claims 13, 14 and 15 of the original Podlesak patent. Group 2 includes Counts 4 to 9, inclusive, which were introduced by the reissue of the Podlesak patent and are Claims 19 to 24, respectively, of said reissue patent. As to the first group of claims, Kane is in the attitude of having waited a period of more than two years after the grant of the Podlesak patent before laying claim to the invention covered by these counts of the interference as being

invention and asking for the interference with the Podlesak patent. Under the recent decisions of the Court of Appeals of the District of Columbia, in *re Fritts* (Patent Appeal No. 973) and *Harold Rowntree vs. Harry M. Sloan* (Patent Appeal No. 1007), an applicant for patent who has an application co-pending with a patent application and who waits a period of more than one year after the grant of the patent before copying claims from the patent and laying claim to the invention claimed as his invention, is estopped from making such claims through his own laches.

In the case of *Rowntree vs. Sloan*, Sloan filed an application in October of 1907, but waited until October 7, 1912, or three years after the grant of the patent to Rowntree before he copied claims from the Rowntree patent and requested an interference. The case was before the Court on the question of priority, it being urged on the part of Rowntree that Sloan had no foundation in his original disclosure for the subject-matter of the counts of the interference. The court, speaking through Justice Robb, stated as follows:

"While in our opinion the view of the lower tribunal is correct, it is unnecessary to discuss the matter for the reason that Sloan's laches in failing within a reasonable time after the issue of the Rowntree patent to make these claims estopped him to make them at all. [In *re Fritts*, present term.] By his delay if his present contention should be accepted the life of the monopoly would be extended for a period of three years. If he thought these claims rested upon his application it was his duty promptly to make them at least within the time allowed for amendment after Office action, and his failure to do so is fatal to his present contention."

It is believed that the present case is on all fours with this decision of the Court of Appeals, and that Kane was in duty bound to promptly make the claims of the Podlesak patent as originally granted if he thought he was entitled to make these claims, and for his failure to do so for a period of over two years he is now estopped by his own laches from claiming this patented invention as his own.

The mere fact that Podlesak applied for a reissue would not seem to change the status, at least as to Counts 1, 2 and 3, which are substantially identical with Claims 13, 14 and 15, respectively, of the original Podlesak patent granted March 4, 1913. The reasoning of the Court in the *Rowntree vs. Sloan* decision was based in part on the fact that to allow Sloan to copy claims from a patent after it has been running for a period of three years would extend the life of the monopoly. In other words, Rowntree had enjoyed a monopoly of the invention set forth in the counts of the interference for a period of three years, and then to grant a patent to Sloan for a period of seventeen years would extend the patent monopoly on that invention to a period of more than twenty years, thus keeping the invention away from the public for a longer period than provided by the statute. The reissue application of Podlesak does not in any way extend the life of the Podlesak patent. The seventeen years runs only from the date of the grant of the original letters patent and,

therefore, it is not seen how the mere grant of the reissue patent to Podlesak in any way changes the conditions. If Kane be granted a patent containing the counts of this interference, the patent monopoly will be extended.

It is believed that your Honors will find that the grant of a reissue does not in any way change the status of Counts 1, 2 and 3, and that Kane is estopped from making the claims corresponding to these counts, and, therefore, the decision of the Examiner awarding priority of invention to Kane should be reversed.

Taking up now Counts 4 to 9, inclusive, it is believed as to these counts that Kane is equally estopped from making claims corresponding to said counts of the interference, by reason of his laches in failing to present claims to the subject-matter involved in these counts for a period of more than two years after the grant of the original Podlesak patent.

In order to determine whether or not the subject-matter of Counts 4 to 9, inclusive, was present and claimed in the original letter patent granted to Podlesak, it will be necessary to consider briefly just what these counts are directed to. It is not thought necessary to copy all the counts, and Count 5 (Claim 20 of reissue) will be taken as an example and reads as follows:

"20. The combination of an igniter having relatively fixed and movable electrodes, an arm on the movable electrode, a generator having a rotor, an arm connected therewith, spring means tending to hold the rotor in a given position, spring means of less tension than the first-mentioned means operating on the first-mentioned arm to hold the same in engagement with the second-mentioned arm, means on one of said arms for adjusting the relation of the arms and, therefore, the relation of the position of the movable electrode in the rotor, a unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted, and a trip device for actuating the rotor."

In the Podlesak patent there is a fixed electrode 3 and a movable electrode 4. The movable electrode is mounted in or connected to an arm 32. A generator indicated at C is provided with a rotor indicated at 20. An arm 31 is connected to the rotor. Spring means 23 holds the rotor in given position and spring means 33 operates on the first-mentioned arm to hold the same in engagement with the second mentioned arm. A screw 35 adjusts the relation of the arms 31 and 32 and the relative position of the movable electrode to the rotor. A unitary bracket indicated at 8 is formed with a body portion which passes through the opening 2 in the cylinder head and carries the movable electrodes; said unitary bracket is also provided with a shelf extending laterally therefrom and formed integral therewith, upon which the generator is mounted. Co-operating with the above parts is a trip device which actuates the rotor.

The essential feature of the above count, when it is considered in the light of the prior art, is the unitary bracket structure having

the integral body portion for the electrodes and the integral shelf upon which the generator is mounted. This feature runs through each of the Counts 4 to 9, inclusive, which are, respectively, Claims 19 to 24 of the patent. Claim 19, which is count 4, calls for an "integral bracket upon which all the aforesaid mechanism is mounted" and the aforesaid mechanism includes the generator and the electrodes. Claim 22, Count 7 of the interference, includes the supporting shelf or base, which extends laterally from the body portion carrying the electrodes and which is formed integral therewith, and on which shelf the generator is mounted. Claim 23, Count 8 of the interference, includes likewise the body, the supporting base which extends laterally therefrom and is formed integral therewith, on which base the generator is mounted. Claim 24, which is Count 9 of the interference, includes the body and a laterally extending base on which the generator and rotor are mounted. Thus it will be noted that through each one of the Counts 4 to 9, inclusive, this integral bracket and body structure, the body supporting the electrodes and the bracket supporting the generator, runs as a limitation.

Claims 16 and 17 of the original Podlesak patent include an igniter frame comprising a body, a supporting base and an arm extending laterally therefrom. They also define the sparking electrodes as mounted in said body and the motor generator as mounted on said base. Claim 18 of the original Podlesak patent also includes an igniter frame comprising a body and a shelf extending therefrom and supporting the generator, the electrodes being mounted in the body and the generator being mounted on the shelf. It will, therefore, be very apparent that Claims 16, 17 and 18 of the original Podlesak patent are directed to the same subject-matter as Claims 19 to 24 of the reissue Podlesak patent.

Upon the issue of the original Podlesak patent Kane had constructive knowledge that Podlesak was claiming as his invention this integral bracket structure or igniter frame which comprised a body for supporting the electrodes and the shelf on which the generator was mounted and Kane should, therefore, within a reasonable time have made claims to this subject-matter as being his invention. His failure to do so for a period of more than two years, under the decisions of the Court of Appeals referred to above, amounted to an estoppel, and Kane should not now be permitted, in view of his own laches, to make claim to the subject-matter contained in Counts 4 to 9, inclusive, of the interference.

For the above reasons it is believed your Honors should find that Kane is not entitled to make any of the counts of the interference and that the decision of the Examiner of Interferences should be reversed and priority of invention awarded to Podlesak.

It happens that in this case there are certain relations between the parties which affect the equities of the situation, and which should have more or less bearing in dealing with this question of estoppel against Kane which has been raised, and also as to his technical right to make the claims. Furthermore, these equities are of such a nature that it may seem advisable to your Honors to

suspend this entire proceeding until the equities are determined in a court proceeding which is now pending before the United States District Court for the Seventh Circuit.

The Kane application was, on May 24, 1915, placed in interference with the patent to one Milton, No. 1,096,948, dated May 12, 1914, which interference is now pending and is, we understand, as yet undecided by the Patent Office. In the present interference the Patent Office has ruled that, if the Kane-Milton interference be finally decided in favor of Milton, any decision in favor of Kane as against Podlesak in this present interference on the question of priority shall be set aside. During the proceedings in the present interference, and after the Milton-Kane interference was declared, and while the attorneys for Kane were seeking to have his application placed in interference with the present Podlesak reissue patent, one of the grounds for the hastening of the interference between Kane and Podlesak and delaying the Milton-Kane interference was that the parties owning the Milton and Podlesak patents were identical, viz.: The Webster Electric Company, that is, at that time the point was made by Kane that he as a single party was conducting, or about to conduct, a contest in two different interferences against two parties whose interests were identical, the Milton patent being actually owned by the Webster Electric Company and the Podlesak patent being jointly controlled by the Webster Electric Company and the Splitdorf Electrical Company, the former being licensees. It happens that on May 4, 1916, there was filed for record in the United States Patent Office an assignment, dated April 20, 1916, transferring the whole right, title and interest in the Kane application to the Webster Electric Company. It therefore appears that the Milton-Kane interference is now being conducted in the interests of a single owner, and that the Kane-Podlesak interference is now, as to one party, Kane, being conducted by the Webster Electric Company, which is a licensee under the Podlesak patent.

We think it will not be denied that at the time Kane made the invention of his application he was employed by the Webster Electric Company, and that at the time Podlesak filed his application he, Kane, knew what Podlesak claimed to have invented, and also knew when the Podlesak patent was issued, and that having failed then to assert his rights as against Podlesak, he should not now be allowed, three years after the grant of the Podlesak patent, and nearly six years after his (Kane's) original application was filed, to put in claims which would conflict with and take away the value of the Podlesak patent. This is particularly inequitable in this case because he has assigned all his rights, title and interest to the Webster Electric Company, which owns the Milton application and is a licensee under the Podlesak patent.

Every doubt should be resolved against Kane in this manifest attempt of the Webster Electric Company to destroy the property (the Podlesak patent) under which they are licensees; under whose protection they have worked for several years, and under which

they have paid and are now paying royalties. It hardly seems that the Webster Electric Company would have paid these royalties to Podlesak, their former employee, unless they considered him to be the true inventor of the invention shown and claimed in the Podlesak reissue patent. Certainly the doctrine of estoppel in the recent Court of Appeals cases above referred to should be evoked most strenuously against the Webster Electrical Company, for it has shared in the monopoly of the Podlesak patent for a term of years and now seeks to destroy the Podlesak monopoly and give to itself a full monopoly for a period of seventeen years or longer. As to Counts 1, 2 and 3, Kane is so clearly estopped by his own laches from making these counts that it is not thought necessary to discuss the question of whether there is a foundation in the Kane application for the subject-matter of these counts. It is believed that Kane is just as clearly estopped by his own laches from making counts 4 to 9, inclusive. If, however, your Honors should find that the estoppel does not extend to these counts of the interference, then it is respectfully requested that Kane's original disclosure be considered with reference to whether or not there is a proper foundation in this disclosure for the subject-matter of these counts of the interference.

Counts 4 to 9, inclusive, of the interference were copied from Podlesak reissue patent No. 13,878 and, under the well-settled practice of the Office, these claims should be construed in the light of the disclosure of the patent. Where both parties to an interference are applicants, then the claims are in the process of being formed for patenting, and may be amended or changed. Under such conditions it is possible that the claim should be given the broadest possible interpretation that language will permit. When, however, the counts of an interference are copied from a patent, then the situation is entirely different. The claims forming the basis of the interference are no longer going through the process of being formed, but have been determined and can not be changed. Under these conditions it is believed that the claims which have been copied from the patent should be construed in just the same manner as the patent will be construed by a court to determine what is the invention covered by the claims of the patent, and that this has been determined then it should be considered whether or not the applicant involved in the interference has disclosed the invention found to be covered by the patent. In the case *Funk & Mickle vs. Whitly*, 114 O. G., 971, it was stated:

Where an applicant copies the claims of a patent for the purpose of provoking an interference * * * if there is any doubt as to the meaning of the issue it shall be construed in the light of the disclosure of the patent."

Podlesak devised an igniter mounting for internal combustion engines. One of the purposes of this mounting is clearly set forth in the description of the patent beginning with line 46 on page 1, as follows:

"As the igniter and generator must be removed from time to time for cleaning the electrodes and other reasons, it is of great importance that the igniter and generator be replaced in exactly the same position it was before removal; otherwise, the push rod will not be disposed in proper relation to the trip finger of the rotor to accomplish satisfactory results in the operation of the engine, generator and igniter."

In order to accomplish this purpose Podlesak provided a body portion 1, which passed through an opening in the cylinder head, and in this body portion he mounted both the fixed electrode and the movable electrode. In order to provide a support for the generator which would permit it to be quickly removed and again returned and placed in exactly the same position, Podlesak provided the following structure:

"The outer end of the igniter body is formed with a rhomboidal plate 5 which, as shown in Fig. 1, has bolt receiving openings 6 that are slightly larger in diameter than the fastening bolts or studs 7 that pass through the openings and are fastened to the cylinder head A. * * * Extending from the plate portion 5 of the igniter body is a shelf or bracket A, which forms a base to which the generator C is removably secured by stud bolts 9." (Lines 7 to 26 of page 2.)

The patentee describes the generator C as follows:

"The generator comprises permanent horseshoe magnets 17 fastened to E-shaped pole pieces 18, on the middle projections of which are generating coils 19. In the present drawings only one pole piece and coil is shown in Fig. 1, the other corresponding parts being concealed from view. Between the pole pieces oscillates a cruciform rotor 20 mounted on a shaft 21, which has at one end oppositely disposed crank arms 22 which are connected with springs 23 that assume an alining position through the axis of the rotor when the latter is idle, the outer ends of the springs being fastened to studs 24 on the generator frame. On the opposite end of the rotor shaft is a strip finger 25, which is adapted to have a wiping engagement with a push rod 26 or other equivalent actuator, which rod has its end opposite from the trip finger connected with the crank pin 27 of the rotating shaft 16."

(Lines 56 to 77, page 2.)

From the above quoted description it will be apparent that one of the essential features of the Podlesak construction consists of the body portion in which the electrodes are mounted, which body portion is provided with a plate having extending therefrom a shelf or bracket 8, on which this generator C is removably secured. Means is also provided for fixing the body portion B and the plate 5 in definite relation to the cylinder, so that the generator and igniter as a whole may be removed and again replaced in exactly the same position as before removal. Also by taking out the stud bolts 9 the gen-

or may be removed from the shelf, and when again placed on shelf there is no possible chance of changing its angular position relative to the push rod, as the shelf is held in fixed position relative to the push rod, and when the generator is again placed on the shelf it will be replaced in this same fixed position as before removal. The patentee clearly describes just what his generator consists of, it includes not only the pole pieces, but also the rotor, the shaft which supports the same, and the trip finger which is engaged by the push rod. When the generator is removed from the shelf it is moved as a whole and another generator can be placed on the shelf, it will be set in proper position so that the timing will not be in any way disturbed.

Claims 19 to 24, inclusive, define in more or less general terms the generator and the fixed and movable electrodes. The especially novel feature running through each of these claims is this mounting of the electrode and generator, which has been referred to above. Claim 19 of the patent, which is Count 4 of the interference, includes the element "an integral bracket upon and in which all the aforesaid mechanism is mounted." The aforesaid mechanism referred to is the fixed and movable electrodes and the generator which has a rotor, an arm connected therewith, springs tending to hold the rotor in a given position, spring means of less tension operating on the arm connected to the movable electrode to hold the same in engagement with the arm on the rotor.

Claim 20, which is Count 5 of the interference, also describes more or less generally the fixed and movable electrodes and the generator and includes as the novel element "a unitary bracket comprising a body in which the fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the generator is mounted."

Claims 21, 22, 23 and 24 of the Podlesak patent, which are, respectively, Counts 6, 7, 8 and 9, each include more or less specifically the integral bracket, having a body in which the electrodes are mounted and a shelf or base on which the generator is mounted.

It is not thought necessary to go at length into the prior art to determine the real scope and meaning of Claims 19 to 24, inclusive, of the Podlesak patent. A brief reference, however, to the patent to Weber, No. 820,535, granted May 15, 1906, will clearly show your honors that the idea of fixed and movable electrodes, a generator having a rotor, an arm connected with the rotor, spring means tending to hold the rotor in a given position, spring means operating on the arm carrying movable electrode to hold the same within range of the arm carried by the rotor, together with a trip device for actuating the rotor, were all well known long prior to the Podlesak invention. The essentially novel feature in the counts of the interference, in view of this Weber patent, is this bracket construction for supporting the electrodes and the generator so that the generator may be removed as a whole and replaced in the same position as before it was removed and so that the entire igniter supporting frame, with the generator and electrodes, may be removed and replaced as desired.

With this understanding of the Podlesak invention, as set forth in the claims corresponding to the counts of this interference, the application of Kane will now be considered.

As has been noted above, Kane's application involved in the interference is alleged to be a division of an application, Serial No. 541,428, filed February 2, 1910, and it is by reason of this early date of this parent application that Kane is awarded priority of invention. If there is no foundation in this parent application, filed February 2, 1910, for the subject-matter forming the counts of the present interference, then the decision of the Examiner of Interferences should be reversed and priority of invention should be awarded to Podlesak.

Kane, in his original application, stated:

"The engine cylinder is provided with the usual side opening adapted to receive the usual igniter block 8."

(Page 2, lines 23 to 26.)

"Secured to the igniter block 8 and preferably cast integral therewith is an arm 14 extending for a short distance approximately parallel with the outer wall of the cylinder 1 and provided at its forward extremity with the angular bearing portion 15, into which the shaft 16, on which is carried the armature or inductor, is journaled."

Page 3, lines 7 to 12.

Page 4, beginning with line 6, it is stated that:

"there is a supporting block 25 in contact with the sleeve 15 and secured thereto by a set screw 25^a."

This is Kane's entire disclosure, as to means for supporting the fixed and movable electrodes and the generator.

From this disclosure it is apparent that the angular bearing portion 15 is the journal bearing for the shaft 16, on which is carried the armature or inductor. In other words, the angular bearing portion 15 is a part of the generator, the shaft of the generator being journaled in said bearing. It is nowhere stated that by removing the set screw 25^a the field portion of the generator may be removed from the sleeve 15, but, even admitting that it could be, the only way in which the generator may be removed from the igniter block 8 is by taking it to pieces. Let us suppose that, for some reason or other, the generator has to be changed. The entire mounting, including the igniter block and the bearing portion 15 would have to be renewed, as this bearing portion 15 is the journal for the armature or inductor shaft. There is certainly no disclosure in the original Kane application of any unitary bracket "comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith, upon which the generator is mounted." This shelf of the Podlesak patent forms a supporting base on which the generator as a whole is mounted and from which it may be removed as a unit and again replaced in exactly the same position as it was before removal. Neither the shelf structure nor the equivalent thereof is disclosed by Kane. The sleeve 15 is a part of the generator in the Kane structure, as above noted.

Where, then, in Kane is the equivalent of the shelf on which the generator, as a unit, is removably mounted?

Figure 4 of the drawings of the Podlesak patent illustrates very clearly the trouble which follows the defective positioning of the igniter. Any shifting of the generator relative to the push-rod bodily or angularly is undesirable and leads to inefficiency. Podlesak, by his integral bracket structure and supporting shelf insures that the generator shall be maintained in proper position relative to the push-rod, even though it be removed and replaced or another generator substituted therefor. The Kane parent application does not disclose either in its description or in its drawings a bracket structure such as defined in the description in the Podlesak patent and set forth in the claims corresponding to Counts 4 to 9, inclusive, of the interference.

The divisional application as originally filed, forms no better foundation for the subject-matter of the counts of this interference. The divisional application was amended to state as follows:

"Pole pieces 20 and 21 are carried on supporting block 25, which is secured by set screw 25^a to the bearing member or bracket on or in which the magneto generator is mounted, thus rendering the magneto generator proper detachable from its firm supporting base, shelf or bracket formed integrally with ignition block or plug 8, as described."

This amendment imports into the specification of the Kane application terms somewhat similar to those used in the claims of the Podlesak patent forming the counts of the present interference. There was, however, no suggestion whatever in the parent application of Kane that the generator proper was carried by a shelf or bracket formed integral with the igniter block and detachable therefrom. Furthermore, these terms as applied to Kane's disclosure have no meaning. Kane has not pointed out by a reference letter what he considers to be his supporting base, shelf or bracket. If he has reference by these terms to the angular portion 15, then the description is inaccurate in its statement that the magneto generator proper is detachable from its supporting base, shelf or bracket 15. This angular portion 15 is a part of the generator and is described as the bearing for the armature shaft. If the igniter block 8 is considered the supporting base, shelf or bracket, then the magneto proper is not detachable from this member. It is perfectly apparent from a cursory consideration of those terms imported into the description by amendment that they have no meaning whatever as applied to the Kane disclosure, and certainly they do not define the invention which Podlesak has described and claimed in his patent.

The Law Examiner is considering the counts of the interference held that the parts 8, 14 and 15 of Kane constitute an integral and unitary structure and they also support the parts of the apparatus as stated in the counts. The Law Examiner further states there is no limitation in the counts as to the character of the shelf or base other than it shall extend laterally from the body and shall support certain parts. It is believed in the first place that the Law Examiner was in error in his interpretation of the claims of the Podlesak patent. In

the light of the description of the patent to Podlesak the shelf or base has a certain function. It is so constructed that the generator may be mounted upon the same. To find the equivalent of the shelf or base described and claimed by Podlesak it is believed your Honors must find in the Kane disclosure a structure on which the generator as a unit may be mounted and from which it may be detached and another generator substituted therefor. It is furthermore believed that your Honors should find a support of such a character that itself it shall be the equivalent of a shelf or base on which the generator may be placed and upon which it will rest. There is no support in the Kane disclosure on which the generator as a unit is mounted and from which it may be detached. The member 15 as pointed out above is a part of the generator. It is the bearing for the armature shaft. But even if your Honors should consider that this bearing is the support for the generator, still it is not a shelf or a base on which the generator may be mounted. In other words, in the Podlesak patent there is a flat shelf or base on which the generator as a unit is placed and which determines the position of the generator relative to the trip device. According to the description of the Kane device the support 25 is secured to the part 15 by a set screw 25^a. There is nothing to prevent the turning of this support 25 angularly about the sleeve. In other words, there is nothing to bring about the fixed position of the generator supported by the shelf or base as in the Podlesak invention.

It is not thought necessary to discuss in detail each of the Claims 19 to 24 of the Podlesak patent forming Counts 4 to 9 of the present interference, as this same limiting feature which has been discussed above runs through all these counts.

It is believed your Honors will find that irrespective of the question of Kane being estopped from making the counts of the interference by his laches, that there is no foundation in the Kane application as originally filed, or even as amended, for claims defining the invention claimed in the Podlesak patent.

For reasons above stated, it is respectfully urged that the Examiner of Interferences should not have awarded priority of invention to Kane, as he has no right to make claims corresponding to any one of the counts of the present interference, and, therefore, the decision of record should be reversed and priority of invention should be awarded to Podlesak.

Respectfully submitted,

H. R. Van Deventer, Sturtevant & Mason
Attorneys for Podlesak. May 15, 1916

Appeal No. 9807, Paper No. 48

DECISION

Hearing May 26, 1916.

J. R. S.

Appeal No. 9807

United States Patent Office, Jan. 15, 1917.

Before the Examiners-in-Chief, on Appeal

In the Matter of the Interference Between the Reissue Patent of Emil Podlesak, Granted February 9, 1915, No. 13,878, on Application Filed December 23, 1914; Original Patent Granted March 4, 1913, No. 1,055,076, on Application Filed April 15, 1912, and the Application of Edmund J. Kane, Filed January 14, 1915, No. 2097, which is a Division of Application Filed February 2, 1910, Serial No. 541,428. Interference No. 39,181.

Improvement in Electric Lighters

Mr. H. R. Van Deventer and Messrs. Sturtevant & Mason, attorneys for Podlesak.

Messrs. Brown, Nissen & Sprinkle, attorneys for Kane.

This is an appeal by the party Podlesak from a decision of the examiner of interferences awarding priority of invention to the senior party, Kane, on the record.

No testimony has been taken by either party.

The grounds of the appeal are only generally stated. The contentions of Podlesak are (1) that Kane is estopped from making claims corresponding to the counts of the interference by reason of his laches in presenting the claims in his application and provoking the interferences, and (2) that Kane did not disclose in his application, as originally filed, the subject-matter on which claims may be based corresponding to the counts of the interference.

It is not necessary to pass upon the second point since, in view of our opinion regarding the first ground hereinafter expressed, it is immaterial whether or not Kane is entitled to make the claims which are involved in the interference.

Kane's application was filed on February 2, 1910, but he did not present claims for the interfering matter or seek an interference with Podlesak until some years thereafter. Podlesak filed his application on April 15, 1912, and a patent was granted thereon (#1,055,076) March 4, 1913. Claims 13, 14, and 15 of this patent are respectively, counts 1, 2, and 3 of the present issue. Podlesak applied for a reissue on December 23, 1914, and the reissue patent involved in this interference was granted on February 9, 1915. Claims 19 to 24, inclusive, of this reissue patent are counts 4 to 9, inclusive, of this interference. Kane filed his interfering application on January 14,

1915, and this is alleged to be a division of his above mentioned earlier application of February 2, 1910. The claims corresponding to the nine counts of the issue were filed on April 17, 1915.

It is contended on behalf of Podlesak that the case falls within the doctrine laid down in the case of Rowntree vs. Sloan, 227 O. G. 744, and we agree with this contention.

Claims 13, 14, and 15 of the Podlesak patent, #1,055,076, are directed to the same subject matter as claims 19 to 24, inclusive, of the reissue patent, and it is therefore clear that Kane, as early as March 4, 1913, had notice that Podlesak was claiming to be and had been recognized as the inventor of this subject matter. Notwithstanding this knowledge of Podlesak's status in this regard he did not, until April 17, 1915, take any step in denial of Podlesak's right to a monopoly.

In view of these considerations we reverse the decision of the examiner of interferences and award priority of invention to Emil Podlesak, the junior party.

Limit of appeal: February 5, 1917.

T. G. Steward, Frank C. Skinner, Fairfax
Bayard, Examiners-in-Chief.

Docket Clerk,
Feb. 5, 1917.
U. S. Patent Office.

\$20, C'k, Rec'd Feb. 5, 1917. A. C. C., U. S. Pat. Office

Intf. No. 39,181, Paper No. 50

United States Patent Office

In Interference No. 39,181

EMIL PODLESAK

v.

EDMUND JOSEPH KANE.

APPEAL TO THE HONORABLE COMMISSIONER OF PATENTS FROM THE
BOARD OF EXAMINERS-IN-CHIEF

Honorable Commissioner of Patents, Washington, D. C.

SIR: I hereby appeal to you in person from the decision of the Examiners-in-Chief rendered January 15, 1917, in the interference between my application for Letters Patent for an improvement in Electric Igniters and the reissue patent of Emil Podlesak, in which priority of invention was awarded to the said Emil Podlesak. The following are assigned as reasons of appeal:

1. That the Examiners-in-Chief erred in awarding priority, as to counts 4 to 9 inclusive, to the junior party, Emil Podlesak.

2. That the Examiners-in-Chief erred in not awarding priority, as to counts 4 to 9 inclusive, to the senior party, Edmund Joseph Kane.
 3. That the Examiners-in-Chief erred in holding that "Claims 13, 14, and 15 of the Podlesak patent, #1,055,076, are directed to the same subject matter as claims 19 to 24, inclusive, of the reissue patent."
 4. That the Examiners-in-Chief erred in finding that Kane as early as March 4, 1913, had notice that Podlesak was claiming to be and had been recognized as the inventor of the subject matter of counts 4 to 9 inclusive.
 5. That the Examiners-in-Chief erred in not finding that prior to the grant of the Podlesak reissue patent Kane had no knowledge that Podlesak was claiming to be the inventor of the subject matter of counts 4 to 9 inclusive.
 6. That the Examiners-in-Chief erred in holding the doctrine laid down in *Rowntree vs. Sloan*, 227 O. G. 744, to be applicable to the case at bar.
- A check for \$20.00 in payment of the necessary fee is sent herewith.

Respectfully,

Edmund Joseph Kane, By Williams &
Bradbury, Attorneys. Chicago, Illinois,
February 3, 1917.

Docket Clerk,
Mar. 10, 1917,
U. S. Patent Office.

Intf. No. 39,181, Paper No. 53

In the United States Patent Office

Before the Honorable Commissioner of Patents

Interference No. 39,181

EMIL PODLESAK

VS.

EDMUND JOSEPH KANE,

Electric Igniters

Hearing on Priority

BRIEF FOR EMIL PODLESAK

H. R. Van Deventer, Sturtevant & Mason, Attorneys.

In the United States Patent Office

Interference No. 39,181

PODLESAK

VS.

KANE,

Hearing on Priority

BRIEF FOR PODLESAK

This case comes before your Honor on appeal by Kane from the decision of the Examiners-in-Chief awarding priority of invention to Podlesak, the junior party to this interference. The history of this interference briefly is as follows:

Podlesak failed to overcome the filing date of the senior party, Kane, and was called upon to show cause why judgment of priority should not be rendered against him. Motion to dissolve was brought alleging that Kane, the senior party, had no right to make claims corresponding to the counts of the interference. This motion was duly heard by the Law Examiner, who decided that Kane had a right to make the claims corresponding to the counts of the interference. The Examiner of Interferences then awarded priority of invention to Kane.

An appeal was taken from the decision of the Examiner of Interferences, and after due hearing the Examiners-in-Chief reversed the decision of the Examiner of Interferences and awarded priority of invention to Emil Podlesak. There were two reasons urged before the Board of Examiners-in-Chief as to why Podlesak should be awarded priority of invention. In the first place, it was urged that Kane was estopped from making the claims corresponding to the counts of the interference by reason of his laches in presenting the claims in his application and provoking the interference with Podlesak, who is a patentee. In the second place, it was urged that Kane had not disclosed in his application subject-matter on which claims corresponding to the counts of the interference could be based. The Examiners-in-Chief in their decision have treated only the question of laches and reached the conclusion that this case came within the doctrine laid down in the case of *Rowntree vs. Sloan*, 227 O. G., 744, and for this reason awarded priority of invention to Podlesak as to all the counts of the interference.

Appeal was taken by Kane from this decision of the Examiners-in-Chief as to counts 4 to 9, inclusive, only and, therefore, the decision of the Examiners-in-Chief as to counts 1, 2 and 3 has become final, and judgment as to priority of invention of these counts and the subject-matter covered thereby has been determined in favor of Podlesak.

Podlesak is a patentee. A patent was granted to him on March 4, 1913, No. 1,055,076. This patent was surrendered and an application for reissue thereof was filed on December 23, 1914. This reissue application resulted in the grant of a reissue patent to Podlesak February 9, 1915, No. 13,878. The present interference is between the application of Kane and this reissue patent of Podlesak No. 13,878.

Count 1 of the present interference is identical with claim 13 of the original Podlesak patent and is also claim 13 of the reissue Podlesak patent; counts 2 and 3 of the present interference are substantially identical with claims 14 and 15 of the original Podlesak patent and are claims 14 and 15 of the Podlesak reissue patent; and counts 4 to 9, inclusive, correspond respectively with claims 19 to 24, inclusive, of the Podlesak reissue patent.

Edmund J. Kane filed an application in the Patent Office February 2, 1910. On February 14, 1915, the application in this interference, Serial No. 2,097, was filed and was alleged to be a division of this earlier application, filed February 2, 1910. Kane, in his divisional application, Serial No. 2,097, as originally filed, did not present any claims to the subject-matter involved in this interference. Neither were there any claims presented at any time in the application filed February 2, 1910, which embraced the subject-matter forming the counts of this interference.

On April 17, 1915, Kane filed an amendment in his application, Serial No. 2,097, presenting Claims 7 to 15 of the application, which claims are respectively the issues of the present interference. These claims were made for the first time by Kane in his application more

than two years after the grant of the original letters patent to Podlesak, which was March 4, 1913.

The counts of the interference may be divided into two groups. Group 1 includes Counts 1, 2 and 3, which were substantially identical with Claims 13, 14 and 15 of the original Podlesak patent. Group 2 includes Counts 4 to 9, inclusive, which were introduced after the reissue of the Podlesak patent and are Claims 19 to 24, respectively, of said reissue patent. As to the first group of claims, Kane is in the attitude of having waited a period of more than two years after the grant of the Podlesak patent before laying claim to the invention covered by these counts of the interference as being his invention and asking for the interference with the Podlesak patent.

The Examiners-in-Chief in their decision reached the conclusion that claims 13, 14 and 15 of the Podlesak patent No. 1,055,976, directed to the same subject-matter as claims 19 to 24, inclusive, of the reissue patent. They also held that Kane, as early as March 1913, had notice that Podlesak was claiming to be and had been recognized as the inventor of this subject-matter and his delay, extending over a period of more than two years before he made the claim in his application and took any step in denial of Podlesak's right in his patent monopoly, estopped him from making claim to this subject-matter as his invention under the doctrine laid down in the case of Rowntree vs. Sloan. For the above reason priority of invention was awarded to Podlesak.

As above noted, this appeal is only as to Counts 4 to 9, inclusive. In other words, Kane evidently admits that he is estopped from making Counts 1 to 3, inclusive, under the doctrine referred to, but urges that this doctrine does not apply as to Counts 4 to 9, inclusive, as they are directed to a different invention. Kane in his brief states that he has dropped Counts 1 to 3, inclusive, "because said claims are, and always were, invalid." This is purely Kane's judgment as to Claims 1 to 3, inclusive, influenced largely by the fact that he (Kane) cannot succeed as to the subject-matter contained in the claims. Kane's judgment is not a ruling. No court has passed on the validity of these claims of the Podlesak patent, and they stand as defining an invention belonging to Podlesak.

The reasoning of the Court in the Rowntree vs. Sloan decision was based in part on the fact that to allow Sloan to copy a claim from the patent after it has been running for a period of three years would extend the life of the monopoly. In other words, Rowntree had enjoyed a monopoly of the invention set forth in his patent for a period of three years, and then to grant a patent to Sloan for a period of seventeen years would extend the patent protection to a period of more than twenty years, thus keeping the invention away from the public for a longer period than provided by the Statute.

The reissue patent of Podlesak does not in any way extend the life of the original Podlesak patent. The seventeen years runs only from the date of the grant of the original Letters-Patent. The grant of the reissue patent to Podlesak does not in any way change conditions. If Kane be granted a patent containing any of the counts of this interference, the patent monopoly on the invention described

Podlesak will be extended over two years beyond the period provided by the Statute. Under the Rowntree vs. Sloan doctrine, Kane has estopped from laying claim in April of 1915 [when he provoked the present interference] to the invention which is shown, described and claimed in the original Podlesak patent.

It is well established that a reissue patent must be for the same invention as that set forth in the patent sought to be reissued. Your Honor will find that these conditions exist in the present instance. The difference between Counts 4 to 9, inclusive, and Counts 1 to 3, exclusive, is purely one of scope of claims. As a matter of fact, Count 4 includes every element in Count 1 with the added element of the integral bracket; Count 5 includes every element of Count 2 with the added element of the integral bracket, and likewise Count 6 contains every element of Count 3 with the added element of the integral bracket. This integral bracket is the igniter frame which supports the generator and the parts of the igniter. That this igniter frame is also part of the Podlesak invention as claimed in his original Letters-Patent is clear from an inspection of the claims. Claim 16, for example reads as follows:

"The combination of an igniter frame comprising a body, a supporting base, an arm extending laterally therefrom, with an internal combustion motor, sparking electrodes mounted in said body, a magneto generator mounted in said base, means for actuating said generator to generate current, means for actuating one of the electrodes, and means relatively fixed on said motor for engaging said laterally extending arm.

If this interference as to Counts 4 to 9, inclusive, be decided in favor of Kane, the public would not be entitled to make the invention described and claimed in the Podlesak patent when said Podlesak patent expires. Upon the issue of the original Podlesak patent, Kane had constructive knowledge that Podlesak was claiming as his invention this integral bracket structure or igniter frame which comprised a body for supporting the electrodes and shelf on which the generator is mounted, and Kane should have made, therefore, within reasonable time claim to this subject-matter as being his invention. Particularly is this true when it is considered that Kane eventually filed copy a claim, word for word, as contained in the original Podlesak patent for provoking this present interference.

For the above reason it is believed your Honor will find that Kane is not entitled to make Counts 4 to 9, inclusive, of the interference, and that the decision of the Examiners-in-Chief is correct and should be sustained.

It happens that in this case there are certain relations between the parties which affect the equities of the situation, and which should have more or less bearing in dealing with this question of estoppel against Kane which has been raised, and also as to his technical right to make the claims which will be discussed later.

The Kane application was, on May 24, 1915, placed in interference with the patent to one Milton, No. 1,096,048, dated May 12, 1914, which interference is now pending and is, we understand, as

yet undecided by the Patent Office. In the present interference the Patent Office has ruled that, if the Kane-Milton interference be finally decided in favor of Milton, any decision in favor of Kane against Podlesak in this present interference on the question of priority shall be set aside. During the proceedings in the present interference, and after the Milton-Kane interference was declared, and while the attorneys for Kane were seeking to have his application placed in interference with the present Podlesak reissue patent, one of the grounds for the hastening of the interference between Kane and Podlesak and delaying the Milton-Kane interference was that the parties owning the Milton and Podlesak patents were identical, viz: The Webster Electric Company, that is, at that time the point was made by Kane that he as a single party was conducting, or about to conduct, a contest in two different interferences against two parties whose interests were identical, the Milton patent being actually owned by the Webster Electric Company and the Podlesak patent being jointly controlled by the Webster Electric Company and the Splittorf Electrical Company, the former being licensee. It happens that on May 4, 1916, there was filed for record in the United States Patent Office an assignment, dated April 20, 1916, transferring the whole right, title and interest in the Kane application to the Webster Electric Company. It therefore appears that the Milton-Kane interference is now being conducted in the interests of a single owner, and that the Kane-Podlesak interference is now, as to one party, Kane, being conducted by the Webster Electric Company which is a licensee under the Podlesak patent.

We think it will not be denied that at the time Kane made the invention of his application he was employed by the Webster Electric Company, and that at the time Podlesak filed his application he, Kane, knew what Podlesak claimed to have invented, and also knew when the Podlesak patent was issued, and that having failed then to assert his rights as against Podlesak, he should not now be allowed three years after the grant of the Podlesak patent, and nearly six years after his (Kane's) original application was filed, to put in claims which would conflict with and take away the value of the Podlesak patent. This is particularly inequitable in this case because he has assigned all his right, title and interest to the Webster Electric Company, which owns the Milton application and is a licensee under the Podlesak patent.

Every doubt should be resolved against Kane in this manifest attempt of the Webster Electric Company to destroy the property (the Podlesak patent) under which they are licensees; under whose protection they have worked for several years, and under which they have paid and are now paying royalties. It hardly seems that the Webster Electric Company would have paid these royalties to Podlesak, their former employee, unless they considered him to be the true inventor of the invention shown and claimed in the Podlesak reissue patent. Certainly the doctrine of estoppel in the *Rowntree vs. Sloan* case above referred to should be evoked most strenuously against the Webster Electrical Company, for it has shared in the monopoly of the Podlesak patent for a term of years and now seeks to destroy

the Podlesak monopoly and give to itself a full monopoly for a period of seventeen years or longer.

Counts 1, 2 and 3 have been disposed of. Priority of invention as to these counts has been awarded to Podlesak and no appeal has been taken therefrom. If your Honor finds that the estoppel does not extend to Counts 4 to 9, inclusive, of this interference, then it is respectfully requested that Kane's original disclosure be considered with reference to whether or not there is a proper foundation in this disclosure for the subject-matter of these counts of the interference. In other words, the only element whatever in Counts 4, 5 and 6 of the interference not found in Counts 1, 2 and 3 is the integral bracket, and this integral bracket structure as set forth in the Podlesak patent is not disclosed in the Kane application, and therefore there is no foundation in the Kane application on which to award priority of invention to Kane.

Counts 4 to 9, inclusive, of the interference were copied from Podlesak's reissue patent No. 13,878 and, under the well-settled practice of the Office, these claims should be construed in the light of the disclosure of the patent. Where both parties to an interference are applicants, then the claims are in the process of being formed for presenting, and may be amended or changed. Under such conditions it is possible that the claim should be given the broadest possible interpretation that language will permit. When, however, the counts of an interference are copied from a patent, then the situation is entirely different. The claims forming the counts of the interference are no longer going through the process of being formed, but have been determined and can not be changed. Under these conditions it is believed that the claims which have been copied from the patent should be construed in just the same manner as the patent will be construed by a court to determine just what is the invention covered by the claims of the patent, and after this has been determined then it should be considered whether or not the applicant involved in the interference has disclosed the invention found to be covered by the patent. In the case of Funk & Mickle vs. Blaisy, 114 O. G., 971, it was stated:

"Where an applicant copies the claims of a patent for the purpose of provoking an interference * * * if there is any doubt as to the meaning of the issue it shall be construed in the light of the disclosure of the patent."

Podlesak devised an igniter mounting for internal combustion engines. One of the purposes of this mounting is clearly set forth in the description of the patent beginning with line 46 on page 1, as follows:

"As the igniter and generator must be removed from time to time for cleaning the electrodes and other reasons, it is of great importance that the igniter and generator be replaced in exactly the same position it was before removal; otherwise, the push rod will not be disposed in proper relation to the trip finger of the rotor to accomplish satisfactory results in the operation of the engine, generator and igniter."

In order to accomplish this purpose Podlesak provided a body portion 1, which passed through an opening in the cylinder head and in this body portion he mounted both the fixed electrode and the movable electrode. In order to provide a support for the generator which would permit it to be quickly removed and again turned and placed in exactly the same position, Podlesak provided the following structure:

"The outer end of the igniter body is formed with a rhomboidal plate 5 which, as shown in Fig. 1, has bolt receiving openings 6 that are slightly larger in diameter than the fastening bolts or studs that pass through the openings and are fastened to the cylinder head A. * * * Extending from the plate portion 5 of the igniter body is a shelf or bracket A, which forms a base to which the generator C is removably secured by stud bolts 9.

(Lines 7 to 26 of page 2.)

The patentee describes the generator C as follows:

"The generator comprises permanent horseshoe magnets 17 fastened to E-shaped pole pieces 18, on the middle projections of which are generating coils 19. In the present drawings only one pole piece and coil is shown in Fig. 1, the other corresponding parts being concealed from view. Between the pole pieces oscillates a cruciform rotor 20 mounted on a shaft 21, which has at one end oppositely disposed crank arms 22 which are connected with springs 23 that assume an alining position through the axis of the rotor when the latter is idle, the outer ends of the springs being fastened to studs on the generator frame. On the opposite end of the rotor shaft is a trip finger 25, which is adapted to have a wiping engagement with a push rod 26 or other equivalent actuator, which rod has its end opposite from the trip finger connected with the crank pin 27 of the rotating shaft 16."

(Lines 56 to 77, page 2.)

From the above quoted description it will be apparent that one of the features of the Podlesak construction consists of the body portion in which the electrodes are mounted, which body portion is provided with a plate having extending therefrom a shelf or bracket 8, on which this generator C is removably secured. Means is also provided for fixing the body portion B and the plate 5 in definite relation to the cylinder, so that the generator and igniter as a whole may be removed and again replaced in exactly the same position as before removal. Also by taking out the stud bolts 9 the generator may be removed from the shelf, and when again placed on the shelf there is no possible chance of changing its angular position relative to the push rod, as the shelf is held in fixed position relative to the push rod, and when the generator is again placed on the shelf it will be replaced in this same fixed position as before removal.

The patentee clearly describes just what his generator consists of and it includes not only the pole pieces, but also the rotor, the shaft

which supports the same, and the trip finger which is engaged by the push rod. When the generator is removed from the shelf it is removed as a whole and another generator can be placed on the shelf, and it will be set in proper position so that the timing will not be in any way disturbed.

Claims 19 to 24, inclusive, define in more or less general terms the generator and the fixed and movable electrodes. The especially novel feature running through each of these claims is this mounting for the electrodes and generator, which has been referred to above. Claim 19 of the patent, which is Count 4 of the interference, includes as an element "an integral bracket upon and in which all the aforesaid mechanism is mounted." The aforesaid mechanism referred to is the fixed and movable electrodes and the generator which has a rotor, an arm connected therewith, springs tending to hold the rotor in a given position, spring means of less tension operating on the arm connected to the movable electrode to hold the same in engagement with the arm on the rotor.

Claim 20, which is Count 5 of the interference, also describes more or less generally the fixed and movable electrodes and the generator and includes as the novel element "an unitary bracket comprising a body in which the fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the generator is mounted."

Claims 21, 22, 23 and 24 of the Podlesak patent, which are, respectively, Counts 6, 7, 8 and 9, each include more or less specifically this integral bracket having a body in which the electrodes are mounted and a shelf or base on which the generator is mounted.

If your Honor will bear in mind the subject-matter of Counts 1, 2 and 3, which are to stand as Podlesak's invention and which clearly cover the idea of the fixed and movable electrodes, a generator having a rotor, an arm connected with the rotor, spring means tending to hold the rotor in a given position, spring means operating on the arm carrying the movable electrode to hold the same within the range of the arm carried by the rotor, together with a trip device for actuating the rotor, it will be apparent that the added novel feature in these Counts 4 to 9 of the interference is the bracket construction for supporting the electrodes and the generator, so that the generator may be removed as a whole and replaced in the same position as before it was removed. With this understanding of the Podlesak invention as set forth in Counts 4 to 9, inclusive, the application of Kane will now be considered.

As has been noted above, Kane's application involved in the interference is alleged to be a division of an application, Serial No. 541,428, filed February 2, 1910, and it is by reason of this early date of this parent application that Kane was awarded priority of invention on the record by the Examiner of Interferences. If there is no foundation in this parent application, filed February 2, 1910, for the subject-matter forming the counts of the present interference, then the decision of the Examiner of Interferences should be reversed

and priority of invention should be awarded to Podlesak, even though there be no estoppel.

Kane, in his original application, stated:

"The engine cylinder is provided with the usual side opening adapted to receive the usual igniter block 8."

(Page 2, line 23 to 26.)

"Secured to the igniter block 8 and preferably cast integral therewith is an arm 14 extending for a short distance approximately parallel with the outer wall of the cylinder 1 and provided at its forward extremity with the angular bearing portion 15, into which the shaft 16, on which is carried the armature or inductor, is journaled."

(Page 3, lines 7 to 12.)

Page 4, beginning with line 6, it is stated that:

"there is a supporting block 25 in contact with the sleeve 15 and secured thereto by a set screw 25^a."

This is Kane's entire disclosure, as to means for supporting the fixed and movable electrodes and the generator.

From this disclosure it is apparent that the angular bearing portion 15 is the journal bearing for the shaft 16, on which is carried the armature or inductor. In other words, the angular bearing portion 15 is a part of the generator, the shaft of the generator being journaled in said bearing. It is nowhere stated that by removing the set screw 25^a the field portion of the generator may be removed from the sleeve 15, but, even admitting that it could be, the only way in which the generator may be removed from the igniter block 8 is by taking it to pieces. Let us suppose that, for some reason or other, the generator has to be changed. The entire mounting, including the igniter block and the bearing portion 15, would have to be renewed, as this bearing portion 15 is the journal for the armature or inductor shaft. There is certainly no disclosure in the original Kane application of any unitary bracket "comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith, upon which the generator is mounted." This shelf of the Podlesak patent forms a supporting base on which the generator as a whole is mounted and from which it may be removed as a unit and again replaced in exactly the same position as it was before removal. Neither the shelf structure nor the equivalent thereof is disclosed by Kane. The sleeve 15 is a part of the generator in the Kane structure, as above noted. Where, then, in Kane is the equivalent of the shelf on which the generator, as a unit, is removably mounted?

Figure 4 of the drawings of the Podlesak patent illustrates very clearly the trouble which follows the defective positioning of the igniter. Any shifting of the generator relative to the push-rod bodily or angularly is undesirable and leads to inefficiency. Podlesak, by his integral bracket structure and supporting shelf, insures

that the generator shall be maintained in proper position relative to the push-rod, even though it be removed and replaced on another generator substituted therefor. The Kane parent application does not disclose either in its description or in its drawings a bracket structure such as defined in the description in the Podlesak patent and set forth in the claims corresponding to Counts 4 to 9, inclusive, of the interference.

The divisional application as originally filed forms no better foundation for the subject-matter of the counts of this interference. The divisional application was amended to state as follows:

"Pole pieces 20 and 21 are carried on supporting block 25, which is secured by set screw 25^a to the bearing member or bracket on or in which the magneto generator is mounted, thus rendering the magneto generator proper detachable from its firm supporting base, shelf or bracket formed integrally with ignition block or plug 8, as described."

This amendment imports into the specification of the Kane application terms somewhat similar to those used in the claims of the Podlesak patent forming the counts of the present interference. There was, however, no suggestion whatever in the parent application of Kane that the generator proper was carried by a shelf or bracket formed integral with the igniter block and detachable therefrom. Furthermore, these terms as applied to Kane's disclosure have no meaning. Kane has not pointed out by a reference letter what he considers to be his supporting base, shelf or bracket. If he has reference by these terms to the angular portion 15, then the description is inaccurate in its statement that the magneto generator proper is detachable from its supporting base, shelf or bracket 15. This angular portion 15 is a part of the generator, and is described as the bearing for the armature shaft. If the igniter block 8 is considered the supporting base, shelf or bracket, then the magneto proper is not detachable from this member. It is perfectly apparent from a cursory consideration of these terms imported into the description by amendment that they have no meaning whatever as applied to the Kane disclosure, and certainly they do not define the invention which Podlesak has described and claimed in his patent.

The Law Examiner in considering the counts of the interference held that the parts 8, 14 and 15 of Kane constitute an integral and unitary structure and they also support the parts of the apparatus as stated in the counts. The Law Examiner further states there is no limitation in the counts as to the character of the shelf or base other than it shall extend laterally from the body and shall support certain parts. It is believed in the first place that the Law Examiner was in error in his interpretation of the claims of the Podlesak patent. In the light of the description of the patent to Podlesak the shelf or base had a certain function. It is so constructed that the generator may be mounted upon the same. To find the equivalent of the shelf or base described and claimed by Podlesak it is believed your Honor

must find in the Kane disclosure a structure on which the generator as a unit may be mounted and from which it may be detached and another generator substituted therefor. It is furthermore believed that your Honor should find a support of such a character that of itself it shall be the equivalent of a shelf or base on which the generator may be placed and upon which it will rest. There is no support in the Kane disclosure on which the generator as a unit is mounted and from which it may be detached. The member 15 pointed out above is a part of the generator. It is the bearing for the armature shaft. But even if your Honor should consider that this bearing 15 is the support for the generator, still it is not a shelf or a base on which the generator may be mounted. In other words, in the Podlesak patent there is a flat shelf or base on which the generator as a unit is placed and which determines the position of the generator relative to the trip device. According to the description of the Kane device, the support 25 is secured to the part 15 by a set screw 25^a. There is nothing to prevent the turning of this support 25 angularly about the sleeve. In other words, there is nothing to bring about the fixed position of the generator supported by the shelf or base as in the Podlesak invention.

It is not thought necessary to discuss in detail each of the Claims 19 to 24 of the Podlesak patent forming Counts 4 to 9 of the present interference, as this same limiting feature which has been discussed above runs through all these counts.

It is believed your Honors will find that irrespective of the question of Kane being estopped from making the counts of the interference by his laches, that there is no foundation in the Kane application as originally filed, or even as amended, for claims defining the invention claimed in the Podlesak patent.

For reasons above stated, it is respectfully urged that the Examiners-in-Chief were correct in awarding priority of invention to Podlesak; that Kane is clearly estopped by reason of his laches from making any of the counts of the interference; and that Kane is further estopped from making Counts 4 to 9, inclusive, of the interference by reason of the fact that there is no foundation in his application for the subject-matter set forth in detail in these claims.

Respectfully submitted,

H. R. Van Deventer, Sturtevant & Mason,
Attorneys for Podlesak. March 8, 1917.

Intf. No. 39,181, Paper No. 54

Recorded, Vol. 123, P. 181

Hearing March 14, 1917.

S. E. T.

In the United States Patent Office

Patent Interference No. 39,181

PODLESAK

vs.

KANE.

Appeal from Examiners in Chief

Electric Lighters

Reissue patent of Emil Podlesak granted February 9, 1915, No. 13,878, on application filed December 23, 1914, original patent granted March 4, 1913, No. 1,055,076, on application filed April 15, 1912.

Application of Edmund J. Kane filed January 14, 1915, No. 2097, division of application filed February 2, 1910.

Mr. H. R. Van Deventer and Messrs. Sturtevant & Mason for Podlesak.

Messrs. Williams & Bradbury for Kane.

This is an appeal by Kane from a decision of the examiners-in-chief reversing the decision of the examiner of interferences and awarding priority of invention to Podlesak.

Podlesak moved to dissolve on the ground that Kane could not make the claims. The law examiner denied the motion. The examiner of interferences entered a judgment in course in favor of Kane. Podlesak appealed to the examiners-in-chief who reversed the examiner of interferences.

The examiners-in-chief held as to counts 1, 2, and 3, which are identical with claims 13, 14, and 15 of Podlesak's original patent, that Kane should, under the decision in *Rowntree v. Sloan*, 227 U. G., 744 (not yet published in App. D. C.), have come in within one year from the granting of the patent, and that as to counts 4 to 9, inclusive, which are claims 19 to 24, inclusive, of the reissue patent, the subject matter is the same as counts 1 to 3 and therefore Kane must be considered to have had notice of these also from the time of the granting of the original patent, in spite of the fact that the claims first appeared in the reissue patent, and that Kane filed within a month of the granting of the reissue patent.

Kane has taken no appeal as to counts 1, 2 and 3. As to counts 4 to 9, I am not disposed, in the absence of experience with the rule, to acquiesce in the extension of the *Rowntree-Sloan* decision which the examiners-in-chief have made in applying it to this case.

A comparison of his disclosure with the patent to Weber, No. 820,535, shows that Podlesak was undertaking to improve thereon in certain rather slight particulars in so far as the recitals of counts 4 to 9 are concerned. Referring, for example, to count 4: Weber discloses all of the elements recited therein combined to operate in the same manner, excepting that the relative tension of the springs is not disclosed in his patent, and that instead of an integral bracket he has a bracket made up of two parts rigidly fastened together.

The law examiner treats the question presented respecting Kane's structure as one of mere adjustment of the anvil 29. It is, however, clear that Podlesak from the start was interested in the question of normal contact or non-contact of the electrodes. In the original specification of his patent, he says, page 7:

The spring 33 is of less tension than the return springs 23 of the rotor and is sufficient to maintain the arms 31 and 32 in contact during the first part of the cocking movement of the armature and to maintain the electrodes in contact during the final part of such cocking movement, it being understood that the electrodes are normally separated, and that they come into contact before the rotor or armature finishes its cocking movement, or the position of the rotor shown by dotted lines in Figure 1.

This language is found in the reissue patent, page 2, lines 98 to 110, inclusive.

The relative tensioning of the springs was for the purpose of keeping the electrodes normally separated. It seems to me not reasonable to permit Kane to take these claims and apply them to a machine wherein, as he says in his original application, and in the present application, the contacts normally remain in contact (see original application of patent No. 1,204,573, lines 12 and 13).

Moreover, the language of count 4 is clearly descriptive of Podlesak's improvement upon the Weber design, whereas it is a straining of the language to say that the mechanism of Kane is mounted upon his integral bracket.

The foregoing remarks apply to count 5. There is clearly in the Kane construction no shelf upon which the generator is mounted. This latter distinction applies also to count 6. Count 7 specifies a supporting shelf or base, and counts 8 and 9, a base upon which the generator is mounted.

The distinction relied upon is one which necessarily implies a very material difference in the designs. Podlesak, adopting the Weber design, made certain changes in details of construction, while Kane effected somewhat the same result by redesigning the Weber machine.

Where refinements such as are here involved are relied upon for patentability, it would seem that the rule that claims which are taken from a patent for purpose of interference are to be interpreted according to the language of the patent, is peculiarly applicable.

The conclusion is that Kane cannot make the claims constituting counts 4 to 9.

The examiners-in-chief are sustained.

Thomas Ewing, Commissioner, June 18, 1917.

Docket Clerk,
Aug. 6, 1917,
U. S. Patent Office.

Mail Room,
Aug. 6, 1917,
U. S. Patent Office.

Intf. No. 39,181, Paper No. 56

United States Patent Office

Interference No. 39,181

EMIL PODLESAK

vs.

EDMUND J. KANE.

NOTICE OF APPEAL

Now comes Edmund J. Kane and Webster Electric Company, assignor, by his and their attorneys Williams & Bradbury, and gives notice to the Commissioner of Patents of his and their appeal to the Court of Appeals of the District of Columbia from the decision of the said Commissioner rendered on or about the 18th day of June, A. D. 1917, awarding priority of invention to Podlesak in the above entitled case, and assign as his and their reasons of appeal the following:

(1) That the said Commissioner erred in holding Emil Podlesak to be the original and first inventor of counts 4 to 9 inclusive of the issue of the said interference.

(2) That the said Commissioner erred in not awarding priority of invention to Edmund J. Kane as to counts 4 to 9 inclusive of the issue of the said interference.

(3) That the said Commissioner erred in finding and holding that the subject matter of counts 4 to 9 inclusive of the issue of the said interference are not disclosed in the application of the said Edmund J. Kane.

And the Honorable Commissioner of Patents is hereby requested to furnish the said Court of Appeals with a certified transcript of the records and proceedings relating to this interference.

Edmund J. Kane and Webster Electric Company, By Williams & Bradbury, His and Their Attorneys. Chicago, Illinois, August 3, 1917.

Endorsed on cover: Commissioner of Patents. Patent appeal docket, No. 1147. Edmund J. Kane, appellant, vs. Emil Podlesak. Court of Appeals, District of Columbia. Filed Sep. 20, 1917. Henry W. Hodges, clerk.

[File endorsement omitted.]

Office Supreme Court, U. S.

FILED

JUL 31 1922

WM. B. STANSBURY

CLERK

IN THE

SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, A. D. 1921.

No. 520 93

WEBSTER ELECTRIC COMPANY,

Petitioner.

vs.

SPLITDORF ELECTRICAL COMPANY.

**PETITION FOR A WRIT OF CERTIORARI TO THE CIRCUIT COURT
OF APPEALS FOR THE SEVENTH CIRCUIT, AND
BRIEF IN SUPPORT THEREOF.**

WILLIAM B. KERKAM,

LYNN A. WILLIAMS,

ALBERT G. McCaleb,

Counsel for Petitioner.

IN THE
SUPREME COURT OF THE UNITED STATES.

OCTOBER TERM, A. D. 1921.

No.

WEBSTER ELECTRIC COMPANY,
Petitioner.

vs.

SPLITDORF ELECTRICAL COMPANY.

PETITION FOR A WRIT OF CERTIORARI TO THE
CIRCUIT COURT OF APPEALS FOR THE SEVENTH
CIRCUIT, AND BRIEF IN SUPPORT THEREOF.

*To the Honorable, the Chief Justice and Associate Jus-
tices of the Supreme Court of the United States:*

Your petitioner, Webster Electric Company, respect-
fully prays for a writ of certiorari to review a judg-
ment by the Circuit Court of Appeals for the Seventh
Circuit.

The Court of Appeals has declared a patent void by
sustaining a novel defense which was never before con-
sidered in any published decision. Petitioner's counsel
estimate that this defense, if a defense, will invalidate
fully one-half of the United States patents in existence.

Questions Presented.

1. When a patent covering a novel invention of merit is issued in full compliance with the statutes, may it be held invalid for either of the following reasons:

(a) Because the patentee's invention was put in public use *during the pendency of his application*, but two years before he formulated an allowable claim properly defining his actual invention.

(b) Because the invention was disclosed, but *not claimed*, in patents *issued during the pendency of his application*, but two years before he formulated an allowable claim to his invention.

2. When a patent covering a novel invention of merit is issued in full compliance with the statutes, may its validity be challenged because of an alleged failure of the Patent Office to enforce a non-statutory doctrine* established solely to expedite Patent Office procedure.

Proceedings Below.

Petitioner (plaintiff) charged, *inter alia*, that the Splitdorf Electrical Company had infringed Kane patent No. 1,280,105, granted September 24, 1918. The District Court found claims 7 and 8 of the patent valid and infringed, but was reversed by the Circuit Court of Appeals—the latter court filing *two opinions*. In its first opinion, the Court of Appeals found claims 7 and 8 void for want of novelty. A rehearing was granted, and on May 8, 1922, said court filed a second opinion *admitting error* in the first, finding that claims 7 and 8 cover a novel and meritorious invention, but holding

* The doctrine governing Patent Office interference practice which was criticized and corrected by this court in *Chapman v. Wintroath*, 252 U. S. 126.

them invalid solely because they were not formulated and presented in the patent application until shortly before its allowance. In support of its decision, the Court of Appeals evolved what we consider to be an *unwarranted* and *most dangerous* interpretation of the opinion by Mr. Justice Clarke in *Chapman v. Wintroath, supra*.

Brief Statement of the Case.

The record shows that the invention in suit filled a long felt want, and in a most startling and gratifying manner turned abject failure into phenomenal success.

The Kane patent in suit issued on an application which was filed January 14, 1915, and which constituted a proper division of a *then pending* original application filed February 2, 1910. When the divisional application was filed, it did not include claims 7 and 8. The claims were not and *could not* be inserted until very shortly before the allowance of the application for two amply sufficient reasons. The *first* of these reasons is that the application was, under the Patent Office rules, not subject to amendment during a period including the years 1915-16-17 and 18. During this period, it was tied up in an interference which was bitterly contested by the Splittorf Electrical Company—the same party who now charges laches in submitting claims 7 and 8. The *second* reason is that the intangible thing—the invention—proved to be an unusually difficult thing to describe by patent claims. It was not until after the invention had been scrutinized, weighed and analyzed by the courts and Patent Office tribunals in several suits and interferences that the *real invention* and the proper language for defining it were determined. Even the distinguished Circuit Court of Appeals frankly ad-

mits that in its first opinion it fell into error solely through its failure to perceive the real invention.

The real invention of Mr. Kane, *i. e.*, the thing covered by claims 7 and 8 was disclosed but not claimed in certain Milton and Podlesak patents, which were issued two years before claims 7 and 8 were presented in Mr. Kane's divisional application. However, Mr. Kane was most diligently prosecuting his divisional application *well within two years* after the grant of each of these patents. Claims 7 and 8 of the Kane patent are entirely unlike any claims in the Milton and Podlesak patents.

Mr. Kane's invention was marketed by petitioner in enormous quantities during the pendency of the patent applications, and the invention had been in public use for over two years before claims 7 and 8 were finally formulated. This circumstance is very common. Inventions of great merit cannot be withheld from the public until the Patent Office functions.

The Court of Appeals admits the novelty and utility of the invention of the claims in suit, but has held such claims invalid upon the theory that, in the period devoted to contesting interferences and overcoming the arguments of the Primary Examiner, the unfortunate patentee abandoned his invention through his failure, or more correctly, *inability*, to submit allowable claims to his real invention before such invention had been in public use for two years, and before it had been published for two years by the issuance of the patents to the parties Milton and Podlesak, *who did not invent* and did not in their Patent Office applications claim the invention in question. The Supreme Court decision in *Chapman v. Wintroath*, 252 U. S. 126, is relied upon for this extraordinary conclusion.

In *Chapman v. Wintroath*, the Supreme Court con-

sidered a doctrine in Patent Office interference practice which had recently been established by the Court of Appeals for the District of Columbia in the exercise of its appellate jurisdiction over the Patent Office. The doctrine in question was found to be harsh and repugnant to the patent statutes, and was duly corrected. But the Seventh Circuit Court of Appeals regards this remedial decision as authority for vitiating a patent of merit which issued pursuant to strict compliance with all of the patent statutes. Petitioner submits that so to interpret *Chapman v. Wintroath* is virtually to assume that the Supreme Court amended the patent statutes when it rendered its decision in that case.

Reasons of Public Import For the Issuance of the Writ.

This case is of great importance for the following reasons :

The Court of Appeals has given to a decision of the Supreme Court a construction which casts most serious doubt upon the validity of thousands of important patents which, like the patent here involved, have issued on applications which could not be rushed through the Patent Office.

The Court of Appeals has converted a doctrine which is properly applicable only to a relatively small number of *applicants* for patents, into an absolute menace to thousands of *patentees* whose patents were applied for and granted in strict compliance with the patent statutes, but who have been unable to put their patent applications into final form until two years after the commencement of public use or publication.

The decision of the Court of Appeals penalizes a patentee because his application became involved

in interference in accordance with Section 4904 of the Revised Statutes.

It virtually charges that in *Chapman v. Wintroath* the Supreme Court exercised legislative powers.

It is in direct conflict with the Supreme Court decision in *U. S. v. American Bell Telephone Co., et al.*, 167 U. S. 224.

It is obnoxious to Sections 4886, 4887 and 4920 of the Revised Statutes.

It defeats the long established policy of the patent laws to reward the inventor who is the first to conceive and perfect his invention and to disclose it to the public.

It denies a patentee a right, which became his by binding contract with the United States, when his patent issued for a novel invention pursuant to an application filed and prosecuted in strict compliance with the statutes.

It has vitiated a patent for a novel and meritorious invention upon a most extraordinary ground never considered by the Supreme Court.

It defeats justice and is inconsistent with the established patent law of this country as defined by the Supreme Court and the several Courts of Appeals.

For these reasons, it is submitted that a writ of certiorari should be issued and the questions involved be determined by this court.

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Counsel for Petitioner.

BRIEF IN SUPPORT OF PETITION.

Statutes Involved.

Sec. 4886. Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, not known or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, or more than two years prior to his *application*, and not in public use or on sale in this country for more than two years prior to his *application*, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor.

Sec. 4887. . . But no patent shall be granted on an *application* for patent for an invention or discovery or a design which had been patented or described in a printed publication in this or any foreign country more than two years before the date of the *actual filing of the application* in this country, or which had been in public use or on sale in this country for more than two years prior to such *filing*.

Sec. 4894. All applications for patents *shall be completed and prepared for examination within one year after the filing of the application*, and in default thereof, or upon failure of the applicant to prosecute the same within one year after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable.

Sec. 4903. Whenever, on examination, any claim for

a patent is rejected, the Commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of renewing his application or of altering his specification; and if, after receiving such notice, the applicant persists in his claim for patent, *with or without altering his specifications*, the Commissioner shall order a re-examination of the case.

Sec. 4904. Whenever an application is made for a patent which, in the opinion of the Commissioner, would interfere with any pending application, or with any unexpired patent, he shall give notice thereof to the applicants, or applicant and patentee, as the case may be, and shall direct the Primary Examiner to proceed to determine the question of priority of invention. And the Commissioner may issue a patent to the party who is adjudged the prior inventor, unless the adverse party appeals from the decision of the Primary Examiner, or of the Board of Examiners-in-Chief, as the case may be, within such time, not less than twenty days, as the Commissioner shall prescribe.

Sec. 4920. In any action for infringement the defendant may plead the general issue, and, having given notice in writing to the plaintiff or his attorney thirty days before, may prove on trial any one or more of the following special matters:

First: That for the purpose of deceiving the public the description and specification filed by the patentee in the Patent Office was made to contain less than the whole truth relative to his invention or discovery, or more than is necessary to produce the desired effect; or,

Second: That he had surreptitiously or unjustly obtained the patent for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same; or,

Third: That it has been patented or described in some printed publication prior to his supposed invention or discovery thereof, or more than two years *prior to his application* for a patent therefor; or,

Fourth: That he was not the original and first inventor or discoverer of any material and substantial part of the thing patented; or,

Fifth: That it had been in public use or on sale in this country for more than two years before his *application* for a patent, or had been abandoned to the public.

And in notices as to proof of previous invention, knowledge, or use of the thing patented, the defendant shall state the names of the patentees and the dates of their patents, and when granted, and the names and residences of the persons alleged to have invented or to have had the prior knowledge of the thing patented, and where and by whom it had been used; and if any one or more of the special matters alleged shall be found for the defendant, judgment shall be rendered for him with costs. And the like defenses may be pleaded in any suit in equity for relief against an alleged infringement; and proofs of the same may be given upon like notice in the answer of the defendant, and with the like effect.

ACT OF FEB. 9, 1893, CH. 74; 27 STAT. L., 434. *

Sec. 9. That the determination of appeals from the decision of the Commissioner of Patents, now vested in the general term of the Supreme Court of the District of Columbia, in pursuance of the provisions of Section seven hundred and eighty of the Revised Statutes of the United States, relating to the District of Columbia, shall hereafter be, and the same is hereby, vested

in the Court of Appeals created by this act; and in addition any party aggrieved by a decision of the Commissioner of Patents in any interference case may appeal therefrom to said Court of Appeals.

First Question.

When a patent covering a novel invention of merit is issued in full compliance with the statutes, may it be held invalid for either of the following reasons:

(a) **Because the patentee's invention was put in public use during the pendency of his application, but two years before he formulated an allowable claim properly defining his actual invention?**

(b) **Because the invention was disclosed, but not claimed, in patents issued during the pendency of his application, but two years before he formulated an allowable claim to his invention?**

The Milton and Podlesak patents did not claim the invention in controversy. If they have any standing in this case, it is merely as *publications* occurring during the *pendency* of Mr. Kane's patent applications. The failure of the Milton and Podlesak patents to claim the invention in controversy is discussed in a following section of this brief.

Prior public use and prior publication of a patented invention are, and always have been considered, statutory defenses. They are two of the defenses recognized by Section 4920 of the Revised Statutes (page 8, *ante*). Hence, we must look to the patent statutes to determine when a public use or publication of an invention will invalidate a patent covering such invention.

In referring to Section 4886 of the statutes (page 7, *ante*) to determine the kinds of public use and publica-

tion which will bar an inventor's right to a patent, we find that the public use to be effective as a bar must occur "*more than two years prior to his application,*" and that publication to be effective as a bar must also occur "*more than two years prior to his application.*" So far as this section of the statutes is concerned, neither a public use nor publication constitutes a bar to a patent if it does not occur more than *two years prior* to the *application* for the patent. There is nothing in this section of the statutes which affords the slightest basis for the proposition that a public use or publication occurring during the *pendency* of a patent application can invalidate a patent granted on such application.

Referring to Section 4887 of the statutes (page 7, *ante*) which is specifically concerned with the effect of public use and publication, we find that no patent shall be granted for an invention if it has been "described in a printed publication in this or any foreign country more than two years *before* the date of the *actual filing* of the *application.*" This section also provides that no patent shall be granted if the invention has been "in public use or on sale in this country for more than two years *prior* to such *filing.*" There is nothing in this section of the statutes which in the slightest degree supports the contention that public use or publication of a patentee's invention, which occurred less than two years before his application for patent, can invalidate his patent. But to contend that publication or public use occurring during the *pendency of the application* invalidates the patent is obviously fallacious and is repudiated by this section of the statute.

Referring now to Section 4920 of the statutes (page 8, *ante*) which enumerates the special defenses which may be presented by a defendant who challenges the

validity of a patent, we find that the defendant may contend with respect to the patentee's invention—

“That it had been patented or described in some printed publication prior to his supposed invention, or discovery thereof, or more than two years *prior* to his *application* for a patent therefor;”

or

“That it had been in public use or on sale in this country for more than two years *before* his *application* for a patent, or had been abandoned to the public.”

The above are the third and fifth defenses enumerated in Section 4920 of the statutes. They are the only ones of these defenses which are concerned with public use or publication. There is nothing in this section of the statutes which is, in any way, compatible with the proposition that public use or publication occurring *less* than two years prior to a patent *application*, or during the *pendency* of the application, is a bar to the grant of a patent on such application.

The meaning of the herein discussed sections of the patent statutes is unmistakable. They have stood the test of the years, and constitute the bulwark of our patent system. Never has any court found in these statutes a basis for the proposition that a public use or publication of a patented invention, which occurs during the *pendency* of the application or *less* than two years prior to its filing, can constitute a bar to the patent granted thereon.

We believe that the Court of Appeals fell into error through its failure to consider the patent statutes. Its decision ignores them. But regardless of whether the Court of Appeals be right or wrong the question involved is so momentous that the public good requires that it be definitely answered by the Supreme Court of the land.

Second Question.

When a patent covering a novel invention of merit is issued in full compliance with the statutes, may its validity be challenged because of an alleged failure of the Patent Office to enforce a non-statutory doctrine* established solely to expedite Patent Office procedure?

* The doctrine governing Patent Office interference practice which was criticized and corrected by this court in *Chapman vs. Wintroath*, 252 U. S. 126.

When, by Section 9 of the Act of Feb. 9, 1893 (page 9, *ante*), Congress gave the Court of Appeals for the District of Columbia appellate jurisdiction over the Patent Office in interference cases, such court was *ipso facto* vested with power to establish and enforce any lawful rule or doctrine that will simplify and expedite the determination of interferences. The Patent Office has always exercised such power, and it is unquestionably possessed by the Court of Appeals for the District of Columbia.

It was in the apparent exercise of such power that the Court of Appeals for the District of Columbia announced, and for a time enforced, the doctrine that an applicant copying claims from an issued patent for the purpose of an interference must copy such claims within *one year* after the grant of the patent. This doctrine was considered by the Supreme Court in *Chapman v. Wintroath*, 252 U. S. 126, and was found invalid because repugnant to the patent statutes. The decision of the Supreme Court implied that the aforesaid doctrine would have been lawful had it required the applicant to copy the issued claims within *two years* instead of within *one year*. But certainly the Supreme Court, in *Chapman v. Wintroath*, went no further than

to criticize and correct a doctrine applicable *solely* to Patent Office interference practice. Admitting that it is lawful for the Patent Office and the Court of Appeals for the District of Columbia to establish reasonable rules and doctrines governing the conduct of *applicants* for patents, does it necessarily follow that an *issued* patent granted under and in full compliance with the statutes can be vitiated merely because some such rule or doctrine was not enforced with the utmost rigidity while the application for the patent was pending? The answer must be "No."

Our negative answer to the second of the questions presented by this petition is supported by two controlling propositions. The first of these is the fundamental proposition that a right created by statute is immune from attack on any ground not recognized by the statute creating it. The second proposition is that an affirmative answer to the question would be out of harmony with the patent statutes and particularly repugnant to Section 4920 of the Revised Statutes (page 8, *ante*).

A patent represents a solemn contract between the sovereign power of the United States on the one hand, and the patentee on the other. The patentee in return for giving the public a description of his contribution to human progress is given the exclusive right to make, use and vend his invention for a limited period of years. His monopoly is created by and governed solely by the patent statutes. The validity of the patent as such must be attacked, if at all, upon statutory grounds. An infringer who defends on the ground that the patent is *invalid* must look to the *statutes* for his defenses.

That the validity of a patent is not subject either to direct or collateral attack upon any ground not recognized by the patent statutes was settled by the Supreme

Court in the case of *United States v. American Bell Telephone Co., et al.*, 167 U. S. 224. In speaking of the statutory right secured to an inventor by his patent grant the court said:

“The statute has given this right, and no consideration of public benefit can take it from him. His right exists because Congress has declared that it should. . . . A party seeking a right under the patent statutes may avail himself of all their provisions, and the court may not deny him the benefit of a single one. These are questions not of natural, but of purely statutory, right. . . . No court can disregard any statutory provisions in respect to these matters on the ground that in its judgment they are unwise or prejudicial to the interests of the public. . . . As the law making power has prescribed what the public will give, specified the terms and conditions of the purchase, indicated the time and methods of determining the right of compensation, he on his part has an absolute legal right to avail himself of all the provisions thus made. It is not, of course, doubted that the courts in construing the patent, as well as all other statutes, must have regard to the spirit as well as the letter. That simply requires that courts shall ascertain their true meaning, but when that is ascertained the applicant for a patent is entitled to all benefits which those statutes thus construed give.”

Congress in creating our patent system realized that, if unrestrained, infringers would devise all sorts of elaborate and far-fetched defenses in their attempts to defeat the purposes of the patent statutes. As a preventive measure, Congress enacted a statute (Section 4920, page 8, *ante*) which enumerates and defines the special defenses which may be pleaded by a defendant who challenges the validity of a patent. Needless to say an infraction of a Patent Office rule or doctrine is *not* one of these defenses.

It is submitted that when a patent is issued, it has

gone forever beyond the control of the tribunals concerned in the issuance of patents, and that no rule or doctrine, established by the Patent Office or the Court of Appeals of the District of Columbia, no matter how reasonable, can be invoked to destroy it, since the patent monopoly was created by statute, and can be destroyed solely upon statutory grounds. Hence, we urge that the Court of Appeals for the Seventh Circuit seriously erred when it came to the conclusion that the Kane patent can be destroyed upon the authority of the rule or doctrine of *Chapman v. Wintroath*.

Divisional Patent Applications.

In the Court of Appeals, counsel for the respondent in referring to the Supreme Court decision in *Chapman v. Wintroath* said:

“It would seem inevitable, from the reasoning of its opinion, that it will hold, when the question comes squarely before it for decision, that a divisional application, like an original application, must stand on its own bottom and be judged by its own date with respect to the statutory defenses applicable to the date of filing an application—especially where, as in the case at bar, the original application contained no claim to the invention in question.”

This is a startling argument in view of the decisions which uniformly have held that a divisional application must be judged as if filed on the date of the filing of the original application of which it is a division.

In *Smith & Griggs Mfg. Co. v. Sprague*, 123 U. S. 249, one of the patents in suit was granted on an original application, while the other was granted on a divisional application filed a year later. But the Supreme Court held:

“For the purposes of this case, therefore, the

date of the application is to be taken as of December 2, 1878, being the earlier of the two."

And in *H. J. Heinz Co. v. Cohn*, 207 Fed. 547, the Ninth Circuit Court of Appeals held, referring to the two patents in suit:

"The latter, being divisional relative to the former, relates back to the date of the original application."

Respondent's argument is nothing short of incomprehensible, however, when we find it conclusively answered by the Supreme Court in the very decision upon which such argument is based.

In demonstrating that no estoppel to copy claims from an issued patent could possibly arise within at least two years after the issuance of that patent, the Supreme Court said:

"There is no suggestion in the record that the original application of the Chapmans was not prosecuted strictly as required by the statutes and the rules of the Patent Office, and therefore, it is settled their rights must not be denied or diminished on the ground that such delay may have been prejudicial to either public or private interests." (Citing and quoting from *U. S. v. American Bell Telephone Company, et al.*, 167 U. S. 224.)

As if for the very purpose of answering the argument which the respondent made to the Court of Appeals, the Supreme Court said:

"To this we must add that not only have later or divisional applications not been dealt with in a hostile spirit, by the courts, but, on the contrary, designed as they are to secure the patent to the first discoverer, they have been favored to the extent that where an invention clearly disclosed in an application, as in this case, is not claimed therein, but is subsequently claimed in another application the original will be deemed a constructive reduction of the invention to practice, and the later one will be given the filing date of the earlier, with all of its priority

right. *Smith & Griggs Mfg. Co. v. Sprague*, 123 U. S., 249, 250; *Van Recklinghausen v. Dempster*, 34 D. C. App., 474, 476, 477."

And the Supreme Court used this language:

"The Chapmans, while asserting that their parent application fully disclosed the invention involved, admit that the combination of the Wintroath patent was not specifically claimed in it."

It conclusively appears that respondent's interpretation of the Chapman case and its contention that the claims of the Kane patent are invalid, because based on a divisional application, are entirely without merit. Kane's divisional application very clearly had all of the priority of right of the original application which was filed on February 2, 1910. The Court of Appeals erred when influenced by respondent's argument to the contrary.

The Invention in Suit.

(Not claimed by Milton or Podlesak.)

The invention of claims 7 and 8 of the Kane patent has been defined as a unitary oscillating magneto ignition equipment. It is employed upon practically all stationary and portable gasoline engines. For the most part these are the engines of the farm. Hundreds of thousands are purchased yearly.

Generally stated, the invention consists in mounting an oscillating magneto and its igniter and *all* of the constituent and associated co-operating parts of each in and upon a single integral support adapted for attachment to an engine. Before the advent of this invention dry-cell battery ignition was universally used on farm engines. It has been displaced by the Kane invention. The advantages of Mr. Kane's invention are many and important, but need not be discussed in this brief, as the

trial court and the Circuit Court of Appeals have found that the invention defined by claims 7 and 8 is both novel and meritorious.

The Milton and Podlesak patents were applied for and granted after the filing of Mr. Kane's original application. Since they did not claim the Kane invention they amount to nothing more than *publications* occurring after the date of application for Mr. Kane's patent. Patented inventions of merit are as often as not found to have been described in patents and other publications during the considerable interval which almost always elapses between the filing of an application for patent and its grant. This is almost always the case when an invention fills a long-felt want, because interested members of the public use it and discuss it, and sometimes improve it and patent their improvements before the inventor can formulate and secure the allowance of claims covering the nucleus of the later developments. We find no decision prior to the Court of Appeals decision in this case which even suggests that an issued patent can be held invalid merely because its invention is shown and claimed in another patent granted earlier, but applied for *later*. But the Milton and Podlesak patents do not even claim the invention of the claims in suit.

If your Honors will bear in mind that the essence of the Kane invention of claims 7 and 8 resides in mounting *all* of the constituent and associated co-operating parts of an oscillating magneto and its igniter upon an integral support forming part of the combination, it can be determined from a casual inspection of the Milton patent that its claims are *not* directed to this inventive thought. A similar inspection of the Podlesak claims would lead to a like conclusion, but such an inspection of the Podlesak claims is entirely unnecessary, for respondent has always contended, and the Commissioner of Patents and the

Court of Appeals for the District of Columbia have held that the *Podlesak* claims are not descriptive of Mr. Kane's device.

Conclusion.

Our patent statutes have remained substantially unchanged for over forty years. Nearly a million and a half patents have been granted. Almost eight hundred thousand of these have not expired. Thousands of patent suits have been decided. Patents have been assailed upon almost very conceivable ground. It is reasonable to assume that the courts of the United States have considered every defense which can *reasonably* be asserted against the validity of a patent granted under these statutes. When a radically new defense questions the *validity* of a patent granted under these statutes, it should be viewed with suspicion until its soundness has been demonstrated beyond doubt. When it appears that one of the Courts of Appeals has accepted such a defense *without considering* its repugnancy to or harmony with the patent statutes, its decision is presumably in error, and should, without doubt, be reviewed by your Honors. This is especially true in the instant case, because the decision of the Court of Appeals not only defeats the purpose of the patent statutes by refusing to recognize the statutory rights secured by a patent on an admittedly novel invention of great utility, but actually challenges the validity of hundreds of other important patents as well.

Justice and the welfare of our patent system require that the writ prayed for be issued.

Respectfully submitted,

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Office Supreme Court, U. S.

FILED

FEB 18 1924

WM. H. STANSBURY

CLERK

IN THE
SUPREME COURT OF THE UNITED STATES

No. 93.

OCTOBER TERM, 1923.

WEBSTER ELECTRIC COMPANY,

Plaintiff-Petitioner,

VS.

SPLITDORF ELECTRICAL COMPANY.

BRIEF IN BEHALF OF PLAINTIFF-PETITIONER.

**LYNN A. WILLIAMS,
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For Plaintiff-Petitioner.

Eastman Bros., Law Printers, 543 S. Dearborn St., Chicago.

CONTENTS.

| | |
|---|----|
| Statement | 1 |
| The parties | 2 |
| Legal questions presented for review..... | 3 |
| Errors relied upon | 6 |
| Chronological outline of the facts..... | 7 |
| The Unitary Magneto Ignition Equipment: | |
| Its relation to the single-cylinder engine..... | 14 |
| Sponsored by T. K. Webster—Invented by Kane— | |
| Refined by Podlesak | 16 |
| Kane's unitary construction (illustrations): | |
| The original form patented by Kane..... | 17 |
| Plaintiff's commercial form of the Kane invention.. | 17 |
| The Unitary Magneto Ignition Equipment: | |
| From a structural point of view..... | 17 |
| Milton's duplicity | 22 |
| The Kane-Milton interference | 23 |
| The Kane-Podlesak interference | 24 |
| Patent claims involved | 26 |
| Respondent's contentions: | |
| The defenses urged in the courts below set forth | |
| and discussed | 27 |
| The opinions of the courts below: | |
| The opinion of the trial court..... | 30 |
| The opinions of the Court of Appeals..... | 30 |
| The pertinent statutes: | |
| A. As to the two-year period: | |
| Sec. 4886 R. S. | 39 |
| Corresponding parts of the Patent Act of 1836 | 39 |
| Corresponding part of the Patent Act of 1839 | 40 |
| Sec. 4887 R. S. | 41 |

| | |
|---|----|
| B. As to renewed applications including so-called divisional applications: | |
| Sec. 4903 R. S. | 41 |
| Corresponding part of the Patent Act of 1836.. | 42 |
| Patent Office Rule 42..... | 43 |
| C. As to pleading the two-year period as a defense: | |
| Sec. 4920 R. S. | 43 |
| D. As to the declaration of interferences: | |
| Sec. 4904 R. S. | 44 |
| E. As to the prosecution of patent applications: | |
| Sec. 4894 R. S. | 45 |
| F. As to applications renewed after forfeiture: | |
| Sec. 4897 R. S. | 45 |
| G. As to the jurisdiction of the Court of Appeals for the District of Columbia in interference cases: | |
| Act of Feb. 9, 1893..... | 45 |

ARGUMENT.

| | |
|---|----|
| A statement of the novel technical defenses to the Kane patent which are said to have been recognized by the Supreme Court in <i>Chapman v. Wintroath</i> , 252 U. S., 126..... | 46 |
| Kane's patent granted on a divisional patent application is entitled to all of the benefit of the filing date of the original application filed February 2, 1910: | |
| (An answer to the first of the novel technical defenses) | 47 |

| | |
|--|----|
| Respondent's contention that a divisional patent application "stands on its own bottom" in its relation to the statutory bars is revolutionary, and if approved would invalidate a large proportion of all existing patents and delay the future development of new inventions | 54 |
| The validity of Kane's claims 7 and 8 is not affected by any public use or publication occurring subsequent to his invention and less than two years before the filing of his original application on February 2, 1910: (An answer to the second of the novel technical defenses) | 56 |
| Kane's claims 7 and 8 were not granted in violation of the two-year rule of <i>Chapman v. Wintroath</i> —Their validity would not be impaired had they been so granted: (An answer to the third of the novel technical defenses) | 60 |
| Kane's original and divisional applications were filed, prosecuted and issued as patents in full compliance with the letter and spirit of the statutes.... | 64 |
| <i>Railway Company v. Sayles</i> , 97 U. S., 554: (Has no application to the case at bar)..... | 68 |
| The contracts involved here..... | 69 |
| Judge Sanborn was correct in holding that the transfer of contract D from the Podlesaks to the Splitdorf and Sumter Companies could not authorize the latter companies to operate under the Podlesak patents | 73 |
| Defendants' contention violates not only the express language, but also the whole intent of contract D.... | 76 |
| The power of exclusion under the Podlesak patents is in plaintiff | 78 |

| | |
|---|-----|
| Defendants' argument that the Podlesaks could "assign" what they could not "give or grant" is a mere play upon words | 79 |
| The assignment clause cannot completely nullify the contract, as defendants contend | 81 |
| The essence of contract D is the grant to the Webster Company of the right to exclude "others"; the exception as to the Podlesaks "themselves" must be construed in favor of the Webster Company..... | 92 |
| The assignment from the Podlesaks to the Sumter and Splitdorf Companies indicates that the defendants knew that the excepted right to the Podlesaks "themselves" was not assignable on the face of Contract D | 94 |
| Plaintiff is not estopped to assert the Kane patent against defendants | 96 |
| Webster Electric Company of Wisconsin is clearly entitled to the benefits of the contract and subject to its liabilities | 102 |
| Defendants' infringement is a tort coupled with malice—Plaintiff's damages should be trebled..... | 105 |
| Conclusion | 110 |

ADDENDUM.

Both courts below were right in holding that Kane's claims 7 and 8 cover a novel and meritorious invention:

| | |
|--|---|
| The purpose of the Kane invention and its astounding success | 1 |
| The prior art | 4 |
| Miscellaneous prior patents | 4 |
| Wattles patent | 5 |
| Weber patent admittedly unanticipatory of Kane claims 7 and 8..... | 6 |
| Additional reasons why the Weber patent does not anticipate the Kane claims..... | 9 |

Infringement:

| | |
|---|----|
| Defendants condemned oscillating magnetos until success of the Kane invention was demonstrated, and then merely copied plaintiff's equipment..... | 12 |
| Kane, not Milton, is the inventor: | |
| Judge Sanborn found that "The evidence as a whole is overwhelming that Milton was not the inventor, and that Kane was." The Court of Appeals did not disturb this finding of fact..... | 15 |
| Review of testimony establishing Kane's inventorship | 17 |
| Defendants' contention rests solely on Milton's assertion, which Judge Sanborn found uncorroborated | 21 |
| Prior to the declaration of the Kane-Milton interference no one connected with plaintiff, except Milton himself, knew that he was not the inventor of the subject-matter claimed in the Milton patent | 23 |
| Kane's statement in the Kane-Milton interference is fully corroborated by the record in this case. Milton has entirely abandoned the assertions then made in his statement..... | 26 |
| Plaintiff made every possible effort to establish Milton's inventorship, and purchased the Kane application only after the fact of Kane's inventorship was overwhelmingly established..... | 27 |
| Milton now admits the falsity of his statements in the Kane-Milton interference and defendants rely wholly on his present but unsupported assertions | 28 |
| Judge Sanborn's opinion of Milton's testimony.... | 30 |
| Milton has proved himself wholly incredible..... | 30 |
| The Chiville letter, which Milton attempted to conceal, conclusively refutes Milton's assertions, on which defendants rely | 32 |

Plaintiff's Exhibit 13. (Excerpt):

Illustrating the *non-unitary* Milton device which
was superseded by the Kane invention..... 36

Plaintiff's Exhibit 24. (Excerpt):

Illustrating the *non-unitary* device which the Sum-
ter Company made in 1911..... 37

Plaintiff's Exhibits 25, 26, 28 and 32. (Excerpts):

Illustrating the systematic attack which the Sum-
ter Company during 1913 and 1914 made on the
Webster Company's type of equipment—the
equipment which the Sumter Company pirated
in 1915 38

Plaintiff's Exhibit 41. (Excerpts):

Illustrating the *Unitary Magneto Ignition Equip-
ment* which the Sumter Company put out in 1915
after it gave up the effort to stem the tide of the
Webster Company's successful equipment, and
after the Sumter Company appropriated the in-
ventions of the patents in suit..... 42

Judge Cooper's revolutionary decision..... 50

Judge Cooper reversed 52

CASES CITED.

American *v.* Prosperity (unreported as yet):

Judge Cooper's revolutionary decision Addendum 50

Same *v.* Same (unreported as yet):

Judge Cooper reversed Addendum 52

Bullen *v.* Deming, 5 B. and C., 842, 108 English Re-
ports, 313 93

Burton *v.* English, Law Reports, Q. B. D., 218..... 93

Capital *v.* Hilson, 59 Fla., 215..... 93

Central Brass *v.* Stuber, 220 Fed., 909..... 86

Chapman *v.* Wintroath, 252 U. S., 126...3, 5, 26, 28, 31, 52

Corrington *v.* Westinghouse, 173 Fed., 69..... 53

| | |
|---|----------------|
| General <i>v.</i> Continental, 256 Fed., 660..... | 53 |
| Gill <i>v.</i> U. S., 160 U. S., 426..... | 92 |
| Godfrey <i>v.</i> Eames, 1 Wall., 317..... | 48 |
| Grant Tire Case, 220 U. S., 428..... | 36 |
| Heinz <i>v.</i> Cohn, 207 Fed., 547..... | 53 |
| Lane <i>et al. v.</i> Locke, 150 U. S., 193..... | 104 |
| Lee <i>v.</i> Vreeland, 317 O. G., 234..... | 53 |
| Montgomery <i>v.</i> De Picot, 153 Cal., 509; 96 Pac., 305.. | 88 |
| Proctor <i>v.</i> Berlin, 256 Fed., 23.....Addendum | 35 |
| Railway Co. <i>v.</i> Sayles, 97 U. S., 554..... | 28, 68 |
| Richmond <i>v.</i> Brandt, 118 Ill. App., 624..... | 93 |
| Rosenwasser <i>v.</i> B. E. Mfg. Co., 207 Fed., 547..... | 53 |
| Root <i>v.</i> Railway Co., 105 U. S., 189..... | 106 |
| Rowntree <i>v.</i> Sloan, 45 App. D. C., 207..... | 26 |
| Savill <i>v.</i> Bethell, Law Journal Reports 1902, Chan- cery Division, 652 | 93 |
| Smith <i>v.</i> Goodyear, 93 U. S., 486..... | 50 |
| Smith <i>v.</i> Sprague, 123 U. S., 249..... | 51 |
| Swarts <i>v.</i> Narragansett, 28 R. I., 436; 59 Atl., 111..... | 88 |
| U. S. <i>v.</i> American Bell Telephone Co., 167 U. S., 224 | 28, 37, 60, 63 |
| Victor <i>v.</i> American, 145 Fed., 350..... | 53 |
| Victor <i>v.</i> American, 189 Fed., 359..... | 99 |
| Wadsworth <i>v.</i> Smith, 11 Me., 278..... | 93 |
| Waterman <i>v.</i> McKenzie, 138 U. S., 152..... | 106 |
| Wintroath <i>v.</i> Chapman, 47 App. D. C., 428..... | 62 |
| Wilson <i>v.</i> Wilson, 241 Fed., 494..... | 104 |
| Wooster <i>v.</i> Crane, 66 Atl., 1093..... | 89 |

IN THE
SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, 1923.

WEBSTER ELECTRIC COMPANY,

Plaintiff-Petitioner,

vs.

SPLITDORF ELECTRICAL COMPANY.

BRIEF IN BEHALF OF PLAINTIFF-PETITIONER.

Statement.

This case comes up by writ of certiorari directed to the United States Circuit Court of Appeals for the Seventh Circuit. It involves the validity of claims 7 and 8 of Kane patent 1,280,105, and the interpretation of a written contract affecting Podlesak patents, reissue No. 13,878, and No. 1,101,956.*

* Your Honors granted the writ of certiorari primarily to review the findings of the Court of Appeals with respect to Kane's claims 7 and 8. However, the questions pertaining to the Kane patent are so intertwined with the contract matter that your Honors will perceive the necessity for considering the contract matter along with the Kane patent. One of the defenses to the Kane patent is based upon the contract in question. Furthermore, a correct determination of the contract questions (decided in favor of the Webster Company by the trial court) is essential to the very existence of the Webster Company.

All of the inventions here involved were made by employees of the Webster Electric Company, at the solicitation and expense of the Webster Company, with its encouragement, in its factory, and with its facilities.

The Parties.

Webster Electric Company is a corporation of Wisconsin, having its principal place of business at Racine, Wisconsin. Splitdorf Electrical Company is a corporation of New Jersey, doing business at Newark, New Jersey, Chicago, Illinois, and elsewhere.

The original defendants were Splitdorf Electrical Co., respondent here, Sumter Electrical Co.,* and H. J. and T. E. Podlesak. The trial court found the Kane and Podlesak patents to be valid and infringed by the Splitdorf and Sumter Companies. Technical infringement by the Podlesaks was not shown and they were dismissed, but *without costs*, because their connivance with the defendant corporations and betrayal of their employer, licensee and benefactor, the Webster Company, shocked the conscience of the court. (Opinion and decree, R. Vol. 1, pp. 797 and 807.)

The Webster Company (plaintiff) is the pioneer manufacturer of an ignition equipment for internal-combustion engines which aptly may be termed a "*unitary magneto ignition equipment*." This equipment is covered broadly by the Kane patent and, in its refinements, by the Podlesak patents. At the time of the trial, it had practically superseded all other forms of ignition for single cylinder gasoline engines.

Neither the Splitdorf Company, nor its co-defendant below, the Sumter Company, had anything to do with the

* The Sumter Company was purchased by the Splitdorf Company (R. Vol. 1, p. 491).

development or commercial introduction of the unitary magneto ignition equipment. It was simply appropriated by them after it had been thoroughly developed and after a large and growing demand for it had been created solely through the efforts of the Webster Company.

The Webster Company is the owner of the entire interest in the Kane patent. The courts below have held, and the Splitdorf Company does not deny, that the generic claims (numbers 7 and 8) of this patent have been infringed, if valid.

The Splitdorf Company is the owner, by purchase from H. J. and T. E.* Podlesak, of the *legal title* to the aforesaid Podlesak patents. Obviously, it is estopped to deny their validity. It admits manufacturing and selling the inventions of these patents, but claims a technical *legal* right to do so.

The Webster Company maintains that the manufacture and sale by the Splitdorf Company of the inventions covered by the said Podlesak patents is unconscionable and entirely inconsistent with the terms and spirit of a license contract† (under which the Webster Company has paid and is paying large royalties to the Splitdorf Company) entered into between the Webster Company and H. J. and T. E. Podlesak before the Splitdorf Company acquired any interest in the Podlesak patents.

Legal Questions Presented For Review.

The major question involved is whether or not the Supreme Court decision in *Chapman v. Wintroath*, 252 U. S., 126, held or intentionally inferred that a patent for an invention of merit may be destroyed upon grounds

* Sometimes referred to as "Emil" or "Tesla Emil" Podlesak.

† Exhibit D (R. Vol. 1, 52).

heretofore unrecognized by the courts—grounds finding no recognition in the patent statutes.

The Circuit Court of Appeals held Kane's claims 7 and 8 invalid notwithstanding that they cover an invention of merit (as the court held), and were granted in a patent applied for and issued in accordance with what has been the approved practice of the Patent Office since the inception of our patent system.

Kane made his meritorious invention in April, 1909, permitted it to go into widespread public use shortly thereafter, and applied for a patent in February, 1910. This original application* was prosecuted regularly in all respects. In the fall of 1914 the applicant presented claims which the Patent Office ruled should be presented in a divisional application. Such a divisional application† was filed in January, 1915, the *original still pending*. This divisional application illustrated and described the same device as the original application and, according to the established Patent Office practice, always approved by the Supreme Court, was entitled to all of the benefits of the filing date of the original application. This divisional application was prosecuted in the regular way. It went through two long, drawn-out interferences, and finally resulted in the patent in suit on September 24, 1918. Claims 7 and 8 were presented in the divisional application on June 15, 1918.

Counsel for the Splitdorf Company contend, and the Court of Appeals held, that claims 7 and 8 are invalid because not formulated and presented in Kane's divisional application until June, 1918 (that is, until after the invention had been in public use and published in improvement patents to others), notwithstanding that the invention of these claims was always disclosed in Kane's

* R. Vol. 2, 502.

† R. Vol. 3, 623.

applications and regardless of the fact that such applications were always lawfully and vigorously prosecuted by the applicant. The patent statutes recognize no such ground for holding a patent invalid, but the Court of Appeals professed to find authority for so doing in *Chapman v. Wintroath*, 252 U. S. 126.

Counsel for Splitdorf Company contend, and the decision of the Court of Appeals infers, that Kane's claims 7 and 8 were granted in waiver or oversight of the rule or doctrine for Patent Office interference practice which was criticized and corrected by the Supreme Court in *Chapman v. Wintroath*. Counsel for the Webster Company contend that the rule was not violated in the allowance of claims 7 and 8, but that in no event could the oversight or waiver of such a rule affect the validity of the claims—directed as they are to a meritorious invention of the patentee.

Counsel for the Splitdorf Company contend, and the Court of Appeals held, that Kane's patent is invalid because granted on a divisional application filed more than two years after the occurrence of one or more of the bars (public use, prior patenting, publication) recognized by Sec. 4886 R. S., notwithstanding that the alleged bars admittedly were not applicable to the original application, and regardless of the legal proposition, always approved by the Supreme Court, that a statutory bar not applicable to an original patent application is not applicable to a division thereof.

An ancillary but highly important question presented is whether or not the Splitdorf Company became immune from suit under the Kane patent and certain Podlesak patents (covering refinements of the Kane invention and issued to Emil Podlesak, a Webster employee) when the Splitdorf Company acquired all of the *assignable rights*

of Emil Podlesak and his brother, H. J. Podlesak, under the license contract* which gave the Webster Company the right to enforce the Podlesak patents against its competitors, and which, though it reserved to the Podlesaks "*themselves*" the right to manufacture the inventions of these Podlesak patents, expressly provided that the Podlesaks were not to "*give or grant*" anyone other than the Webster Company a license under those patents.

The trial court held the defendant companies enjoinable for infringement of the Kane and Podlesak patents, but the Court of Appeals held the Splitdorf Company immune from suit under the Podlesak patents without passing upon the contention that the Splitdorf Company is also immune from suit under the Kane patent.

It is to be inferred that the Court of Appeals did not regard the Splitdorf Company as immune from suit under the Kane patent because it considered the defenses directed to the validity of the Kane patent. If it had regarded the Splitdorf Company as in any sense a licensee (immune from suit) under the Kane patent, it is inconceivable that it would have considered the validity of that patent.

Errors Relied Upon.

Petitioner, Webster Electric Company, believes that the decision of the Court of Appeals should be *reversed*, and the decree of the trial court *affirmed*, for the following reasons:

(1) That the Court of Appeals misinterpreted the Supreme Court decision in *Chapman v. Wintroath* and erred in holding claims 7 and 8 of the Kane patent invalid in view of that authority.

* Exhibit D (R. Vol. 1, 52).

(2) That the Court of Appeals erred in holding (contrary to the opinion of the trial judge) that the reserved right to the Podlesaks "themselves" to manufacture and sell the inventions of the Podlesaks patents in suit was or could be assigned to the Splitdorf Electrical Company and its co-defendant, Sumter Electrical Company.

Chronological Outline of the Facts.

In 1905, Webster Manufacturing Company, under the presidency and guidance of Mr. T. K. Webster, was manufacturing grain elevators, conveying machinery, and gas engines. At that time batteries were almost universally used for gas engine ignition but were the source of endless trouble (R. Vol. 1, 510). In connection with his business, Mr. Webster learned of certain Curtin patents for a magneto generator, and he purchased those patents with the intention of trying to develop magneto ignition (R. Vol. 1, 341, 508). John L. Milton was also interested in this subject and when he learned that Mr. Webster controlled the Curtin patents, he went to Mr. Webster and asked for and was granted opportunity to work with Mr. Webster in the development of magneto ignition (R. Vol. 1, 341, 508, 510).

Milton went to work and constructed numerous magnetos which, though they were good magnetos (current producers), could not successfully be used for ignition purposes. In 1908 it developed that most of Milton's work on such magnetos had been anticipated by two brothers, H. J. and T. E. (Emil) Podlesak, who owned certain patent applications which promised to result in patents dominating all of Milton's work up to that time. Mr. Webster overcame this obstacle by taking a license under the Podlesak applications and agreeing to pay the Podlesaks a royalty (Exhibit A, R. Vol. 1, 39). Neither

of the Podlesaks became associated with the Webster Company at this time. Later, *after* Kane had produced the Unitary Magneto Ignition Equipment, Emil Podlesak went to work for the Webster Electric Company on August 10, 1909.

After four years of struggle and experiment, Webster Electric Company (which had been formed to separate the ignition business from the other business of the Webster Manufacturing Company) by the spring of 1909 had developed an oscillating magneto. That magneto, though the best that Milton could develop out of his own ideas and those of the Podlesaks, was entirely unsatisfactory for its purposes. The only customer to whom Webster Electric Company was supplying this magneto was the International Harvester Company, and, as Mr. Webster testified, the whole magneto business at that time was in flux. Engine builders were using batteries but they wanted magnetos, and many concerns were trying to develop a satisfactory magneto equipment. The only reason why the struggling Webster Electric Company kept the Harvester Company business was because the magneto of the Webster Company, unsatisfactory as it was, was the best machine on the market at that time. But it was so entirely unsatisfactory that on March 15, 1909, the Harvester Company reached the conclusion to discard the Webster magneto (R. Vol. 1, 342, 345, 513, 514, Vol. 2, page 1).

Mr. Webster, being a man of perseverance and determination, was not to be defeated. He called upon his employees, among others Kane and Chiville, who were familiar with the many troubles confronted by the company, to attempt to redesign the Webster ignition equipment so as to retain the Harvester business and thus save the struggling Webster Electric Company (R. Vol. 1, 346, Vol. 2, 121).

Kane's efforts in April, 1909, resulted in the invention of the Unitary Magneto Ignition Equipment. This equipment revolutionized ignition for single cylinder engines, saved the Harvester business, and started the Webster Electric Company on the road to success. **Kane's Unitary Magneto Ignition Equipment was the first practical and commercially successful magneto ignition equipment for single cylinder gas engines** (R. Vol. 1, 348, 235, Vol. 2, page 3).

Although the Kane invention was really the starting point of the Webster Company's success, the first few years following that invention were years of continued struggle to popularize magneto ignition against the handicap of the preceding years of failure. But by 1915 the tide had turned; the sales jumped to 46,444 equipments in that one year, and grew steadily thereafter until in the year 1918 alone (the year before the trial), the Webster Company sold 129,785 equipments (R. Vol. 1, 474).

Mr. Webster, of course, did not cease his efforts with the making of the Kane invention, but continued to develop the Kane equipment to its present state of perfection. Among other engineers whom he employed in this development was Emil Podlesak, who entered the employ of the Webster Company in August, 1909, after the company had commenced the commercial manufacture of the Kane equipment. Podlesak, as did others, improved some details of the commercial device of the Webster Company, but the basis of all this work and of the almost universal present day use of magneto ignition for single cylinder engines was the Unitary Magneto Ignition Equipment, the invention of which by Kane had enabled the Webster Company to survive in 1909 (R. Vol. 1, 349, 411, 416).

It is important to bear in mind a definite distinction between the Podlesak *magneto* inventions, under which

the Webster Company took a license in 1908, and the improvements on the Kane *ignition equipment* which Emil Podlesak made subsequent to August, 1909, *while in the employment of the Webster Company.*

Emil Podlesak's refinements of Kane's generic invention, made by Podlesak while an employee and officer of the Webster Company, were added by Podlesak to the Webster Company's commercial device from time to time. Not until 1914 did the Webster Company see any necessity for any rights to these improvements other than the mere "shop rights" which the relations of the parties created. In February, 1914, these "shop rights" were enlarged and set forth in a written contract (here in suit, R. Vol. 1, 52), which gave the Webster Company the right to prevent competitors from making or selling the Podlesak improvements on the Kane equipment.

In 1910 and 1911 the Sumter Electrical Company (a defendant below and now absorbed by the Splitdorf Co.) was manufacturing an oscillating magneto somewhat similar to the old Webster magneto (Pltf.'s Ex. 13)* which was condemned by the International Harvester Company in 1909 (Pltf.'s Ex. 24)*, and which had been replaced by Kane's generic invention. The Sumter oscillating magneto, like the Webster magnetos which preceded Kane's invention, was unsuccessful. Commencing about 1912, the Sumter Company, while devoting itself to the manufacture of *rotary* magnetos, launched upon an advertising campaign in opposition to oscillating magnetos in general, and to the Webster equipment in particular, but it was unable to oppose the public demand for the Webster equipment (Pltf.'s Ex. 25, 26, 28, 32)*.

The Webster Company, fully aware that its increas-

* These are booklets offered as physical exhibits. Pertinent excerpts are reproduced on pages 36 to 41 of the addendum to this brief.

ing success would prove a temptation to the Sumter Company, took steps in February, 1914, to protect itself against piracy. No patent had yet issued to cover the fundamental invention of 1909, but several patents had issued covering Podlesak's refinements of the Kane invention. Among the Podlesak patents which had issued at that time was patent No. 1,055,076, dated March 4, 1913, which was subsequently reissued as No. 13,878 (in suit). Also expected was the early issuance of the starting lever patent No. 1,101,956, issued in June, 1914 (also in suit). The Webster Company therefore proceeded to fortify itself against the Sumter Company by securing the right to prevent competitors from appropriating the inventions of the Podlesak improvement patents.

On February 5, 1914, the unwritten "shop rights" which the Webster Company had theretofore enjoyed under the Podlesak improvement patents were set forth in a written contract (Ex. D—R. Vol. 1, 52), known as the "shop right agreement," which clothed the Webster Company with the power to exclude competitors from infringing the Podlesak improvement patents and gave the Webster Company the right to institute and maintain infringement suits for that purpose. The agreement, in the third paragraph of its preamble, stated that the Webster Company was desirous of securing the right

"to bring and maintain suits against infringers of the patent rights covering the said inventions."

This right to bring and maintain suits against infringers was expressly given in the second granting clause of the agreement which, after setting forth that the Podlesaks* would aid and assist each other, "in any suit or

* The Podlesak brothers were "parties of the first part." They had contracted jointly to own all the Podlesak patents relating to magnetos and ignition equipments (R. Vol. 1, 44).

proceeding brought under any of said patents" provided as follows:

"The parties of the first part (Podlesaks) hereby appoint the attorneys for the party of the second part (Webster Company) as their agent and attorney for the purpose of joining them as parties complainant where necessary or desirable, in any suit which the party of the second part (Webster Company) may wish to bring on account of the infringement of any of said letters patent."

The Podlesaks desired to retain a personal right to make, use and sell devices embodying the inventions in question, but the possibility of this reserved right being transferred to any competitor of the Webster Company was guarded against in the first of the granting clauses of the agreement, which provided

"that they (Podlesaks) *will not*, while this shop license to the party of the second part (Webster Company) is in force, *give or grant* shop licenses to others to make, use or sell herein said inventions, expressly *reserving*, however, the right to *themselves* to make, use and sell the herein said inventions."

Endowed with the power to enforce the Podlesak improvement patents against all competitors save the brothers Podlesak (and they did not promise to be and never have been competitors), and the Podlesaks having agreed not to "*give or grant*" licenses to its competitors, the Webster Company believed itself to be prepared for the day when the Sumter Company or any other competitor, might yield to the temptation to pirate the unitary magneto ignition equipment.

In 1914 the Webster Company's sales were 11,458 equipments, but in 1915 the sales jumped to 46,444. This rapidly widening market for ignition equipments of the type originated by Kane and refined by Emil Podlesak was too strong a temptation for the Sumter and Splitdorf Companies. In the middle of 1915 the Sumter Com-

pany simply pirated the unitary magneto ignition equipment, and the Splitdorf Company purchased the Sumter Company (Pltf.'s Ex. 41, R. 491)*.

The Podlesak brothers promptly requested the Webster Company to bring suit against the Sumter Company for its infringement of the Podlesak improvement patents, as the Webster Company was empowered to do under the contract of February 5, 1914. A bill of complaint was sworn to by Emil Podlesak on August 3, 1915, and suit was commenced against the Sumter Company on August 21, 1915, at Charleston, South Carolina (R. Vol. 2, 35). The parties plaintiff were Webster Electric Company and the brothers Podlesak.

The Sumter and Splitdorf Companies, however, believing that the great demand for the Webster equipment justified any means which would enable them to pirate the market, seduced the Podlesaks; the very day before the bill of complaint was filed, they secured from the Podlesaks, wholly unknown to the Webster Company, an option to buy all of the Podlesak patents and their contracts with the Webster Company (R. Vol. 1, 497).

This option eventuated in the contract (Ex. F to the Bill of Complaint, R. Vol. 1, 60) of September 4, 1915, between the Sumter and Splitdorf Companies and the Podlesaks. At the time of the hearing in the Court of Appeals, the Splitdorf and Sumter Companies had received over \$112,000 in royalties from the Webster Company, while they paid the Podlesaks only \$65,000 for the assignment of the contracts.

Following their seduction of the Podlesaks, the Splitdorf and Sumter Companies took the position that they were immune from suit under the Podlesak improvement

* This is a booklet introduced as a physical exhibit. Pertinent excerpts therefrom are reproduced on pages 43 to 49 of the addendum to this brief.

patents and entitled to *control* any litigation thereunder, and called upon the Webster Company to dismiss not only the South Carolina suit, but also other litigations which the Webster Company had instituted against strangers to any of the contracts. The Webster Company replied by dismissal without prejudice (R. Vol. 2, 46) of the South Carolina suit and the filing of the present suit against the Sumter and Splitdorf Companies and the two Podlesak brothers, jointly.

Following the institution of this suit on October 12, 1915, the Webster Company and the Splitdorf Company became involved in a Patent Office interference involving the Podlesak reissue patent No. 13,878, and the application of Kane which eventuated in the Kane patent in suit which covers the unitary ignition magneto equipment broadly.

This interference did not terminate until May, 1918. The Kane application issued on September 24, 1918, as patent No. 1,280,105, which was promptly included in the present suit by an original bill in the nature of a supplemental bill (R. Vol. 1, 184).

The Unitary Magneto Ignition Equipment.

(Its Relation to the Single Cylinder Engine.)

The single cylinder gas engine—sturdy, and moderately priced—had taken a most important role in the drama of American progress. It performs the drudgery of the nation. It saws the wood, pumps the water, churns the butter, drives the concrete mixer—in short, performs a thousand and one tasks for people in all walks of life. This hard-working engine—there are hundreds of thousands of them in use—comprises in its makeup one organism which must function unfailingly and with absolute precision. This is the *ignition equipment* which furnishes the vital

spark, without which no ordinary gas engine can operate. At a very early date, ignition became *the* serious problem which prevented the single cylinder gas engine from attaining its present importance. Whosoever could devise a satisfactory ignition equipment for this type of engine would achieve distinction and financial reward for himself, and would enable the single cylinder engine to come into its own.

The ignition problems involved in the operation of a single cylinder gas engine are radically different from the ignition problems pertaining to an automobile or other multiple cylinder engine. The single cylinder engine is used on the farm, in the forest, on the highways, and in many other places remote from shops and mechanics. It is usually in charge of a laborer whose knowledge of electricity and magnetos is most meagre. Such engines are seldom protected from the weather. Often they stand exposed to the elements for months at a time. For purposes of economy they usually burn low grade fuel which will quickly foul and render useless the "spark plugs" commonly used with other types of engines.

For these reasons, and others which have been discussed by the witnesses in this case, ignition for single cylinder engines has developed along lines widely divergent from ignition for automobile and other multiple cylinder engines. The automobile and other multiple cylinder engines are universally equipped with various forms of the "high tension" or "jump spark" type of ignition with which this controversy is in no way concerned. In connection with single cylinder engines, we now just as universally use a "low tension" or "make and break" type of ignition incorporated in the *Unitary Magneto Ignition Equipment*. The history of the Unitary Magneto Ignition Equipment centers entirely around the Webster Electric Company.

Sponsored by T. K. Webster—Invented by Kane—Refined by Podlesak.

Mr. T. K. Webster was not a designer or inventor of ignition devices, but he was of the type of men who have made ours the most progressive of nations in the development of the useful arts. At an early date he had the perception to realize the need for an individualistic type of ignition for single cylinder engines, the vision to foresee the possibility of its creation, the ability to select, direct and encourage engineers and mechanics engaged to accomplish his purpose, and the courage persistently and for years to pursue his objective to accomplishment despite most vexatious discouragements.

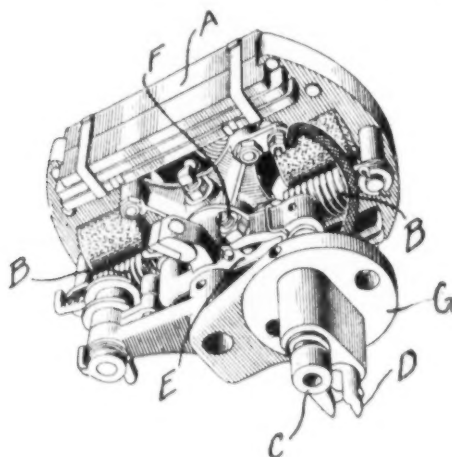
In a broad sense, the Unitary Magneto Ignition Equipment is the creation of Mr. T. K. Webster. In a narrower sense, it represents the sum total of the best efforts of three engineers who along with many others worked for the Webster Company under the guidance of Mr. Webster in the decade from 1905 to 1915. These engineers were John L. Milton, Edmund J. Kane, and Emil Podlesak. As an inventor, the greatest of these was *Kane*.

Kane, a young man recently out of college and not in the rut of his predecessors, produced the Unitary Magneto Ignition Equipment when the more experienced Milton and all of his associates had failed to provide a satisfactory ignition equipment after four years of continuous effort. Podlesak, an experienced designer, and a competent factory manager, added certain meritorious refinements to the equipment which Kane produced.

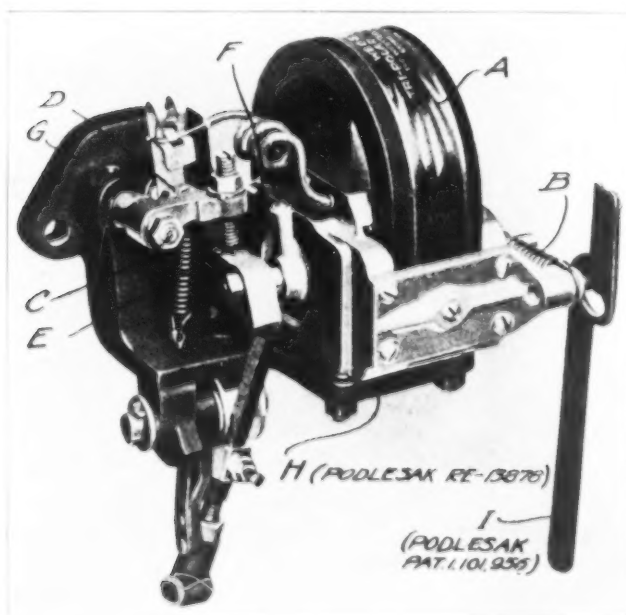
Strictly speaking, Milton had nothing to do with producing the Unitary Magneto Ignition Equipment. He did contribute much to the perfection of a specific type of tri-

Kane's Unitary Construction.

ALL OF the mechanism is mounted upon a single supporting member having a single attaching part G.



The Original Form Patented by Kane.



Plaintiff's Commercial Form of the Kane Invention.
(Embodying Podlesak Improvements.)

polar inductor magneto (current generator) which *may*, and in the devices of the Webster Company does, form a *part* of the Unitary Magneto Ignition Equipment. But Milton's magneto is not an indispensable part of that equipment. Other specific types of magneto may be substituted for it. In fact, that is just what has been done by the Splitdorf Company.

Kane invented and constructed the first Unitary Magneto Ignition Equipment which was ever given to the public. Emil Podlesak, while an employee and officer of the Webster Company, contributed improvements to that which Kane had produced. Kane was a pioneer. Podlesak, though he did good work was a mere improver of Kane's pioneer invention.

The Unitary Magneto Ignition Equipment.

(From a Structural Point of View.)

Since both of the courts below have definitely held that claims 7 and 8 of the Kane patent describe a meritorious invention, most of our comments with respect to the *merits* of the Kane invention have been relegated to the addendum to this brief. However, there are certain structural characteristics of the Unitary Magneto Ignition Equipment which your Honors should have clearly in mind in considering some of the novel defenses which counsel for the Splitdorf Company will urge against claims 7 and 8 of the Kane patent.

Opposite this page are cuts illustrating the Unitary Magneto Ignition Equipment in the original form in which it was invented by Kane and put upon the market by the Webster Electric Company in 1909 and in the refined form (including Podlesak's improvements) which it had attained when this suit was instituted in 1915.

Similar reference characters have been applied to corresponding parts in the two forms of the equipment.

The Unitary Magneto Ignition Equipment, in each of the illustrated forms, comprises a magneto generator A, driving springs B, relatively movable electrodes C and D, devices E and F whereby the electrodes are separated at a predetermined point in the movement of the movable element (rotor) of the magneto generator, and an igniter block G, attached to the engine by bolts extending through apertures *g*, the igniter block constituting a single mounting means for **ALL** of the aforesaid mechanism.

The importance of this one-group construction is due to the fact that the proper ignition of the explosive mixture in an internal combustion engine is absolutely essential to its operation, and that the ignition of the explosive charge is prevented whenever the spark electrodes become foul. There is unpreventable deposit of carbon upon these electrodes and the block in which they are mounted. As explained by the experts, it is necessary not merely occasionally, but frequently, to clean the carbon deposit from the electrodes and exposed end of the igniter block. To do this, it is necessary to remove the igniter block with its electrodes from the engine cylinder.

With Kane's unitary or one-group equipment, the inexperienced operator of an engine can and does remove the entire equipment whenever the spark electrodes require cleaning. The carbon may be scraped or brushed from the electrodes and the igniter block in which they are mounted, and the entire ignition mechanism may be returned to its position upon the engine without changing or destroying for one instant the mechanical relationships between all of the parts, the accuracy of whose adjustment is essential to the operation of the ignition equipment.

In order to determine whether the cleaning of the electrodes has removed any particle of carbon which may have effected a fatal short circuit, the operator has merely to cock and release the rotor of the generator while removed from the engine in order to observe whether the requisite "fat" spark is produced between the electrodes. If the spark is of the proper character, the magneto equipment is replaced upon the engine with the certainty that it will produce identically the same spark when actuated by the push rod of the engine as when cocked and released in the hands of the operator.

If after cleaning the electrodes, the hand operation of the mechanism does not effect the production of a fat, hot spark between the electrodes, then the inexperienced user of the engine may change his adjustments one way and the other until the hottest, fattest possible spark is produced. By cocking and releasing the rotor of the generator, while holding the unitary and completely assembled equipment in his hands, he can see and determine by his eye alone when the best adjustment is secured. If, on the contrary, the ignition equipment could be made to function only when assembled upon the engine (as was the case with all of the various equipments which preceded Kane), then it would be impossible to observe the character of the spark, because the electrodes in that case would be concealed within the cylinder of the engine. Under such circumstances, the character of the ignition spark could be determined only by the use of elaborate electrical measuring instruments, with which, of course, the ordinary user is not supplied; or by cranking the engine in an effort to make it run, followed by repeated removals and adjustments of the equipment. Long continued cranking of an engine which refuses to start, in order to test such repeated readjustments, is a task of exasperating difficulty.

The structural characteristics which distinguish Kane's unitary equipment from every one of the invariably unsatisfactory magneto equipments which preceded it, and the advantages which, as early as 1918, made this equipment the universal standard on over 80% of all single cylinder engines manufactured in the United States, are clearly and definitely set forth in Kane's claims 7 and 8, which read as follows:

"7. In an electrical ignition device for internal combustion engines, the combination of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, a **RIGID UNITARY AND INTEGRAL SUPPORT UPON WHICH ALL OF THE AFORESAID PARTS ARE MOUNTED**, whereby **ALL** of said parts may be removed from and returned to their position upon an engine cylinder without disturbing their relations one to another, conductors for carrying electric current from said generating winding to said electrodes, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it.

"8. In an electrical ignition device for internal combustion engines, the combination of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, a **SUPPORTING MEMBER** upon the several parts of which **ALL** of the aforesaid mechanism is mounted and having a single integral part adapted to be attached to the

engine, whereby **ALL** of said mechanism may be removed from the engine by removing said single integral part and may be returned to its position upon the engine with unchanged relations between any and all of the parts of all of said mechanism, thereby insuring the predetermined synchronism and inter-related adjustment of said mechanism when it is replaced upon the engine, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it."

If your Honors will bear in mind that the essence of the Kane invention of claims 7 and 8 resides in mounting **ALL** of the constituent and associated co-operating parts of an oscillating magneto and its igniter upon a rigid support forming part of the combination, you cannot possibly be misled into the belief that Milton or Podlesak ever *claimed* Kane's fundamental invention.

We do not believe that the validity of Kane's claims 7 and 8 would have been affected in the least if Milton or Podlesak (neither being the inventor of the subject-matter) had claimed Kane's real invention in their patents which happened to issue before his. But the fact is that they *did not* claim it.

Referring again to the cut of the Webster Company's commercial equipment which appears opposite page 17, *ante*, we shall explain that Emil Podlesak's most important refinements of the Kane equipment consisted, *firstly*, in substituting a horseshoe magnet type of magneto for the straight bar magnet machine which Kane had originally used, and in providing the equipment support with a flat base or *shelf* H integral with the igniter block G upon which the horseshoe magnet type of magneto rests, and, *secondly*, in providing the machine with a lever I which facilitates adjusting and testing the equipment off the engine, and is also useful in operating the magneto to give an initial spark for starting the engine. These refinements are covered respectively by the Podle-

sak patents, reissue 13,878, and 1,101,906, both here in suit.

There may exist a question as to whether the substitution by Podlesak of the horseshoe magnet machine for the straight bar magnet machine, the provision of the shelf, etc., as shown by reissue 13,878, involved invention as distinguished from the skill of an expert mechanic. These improvements are important from the standpoint of manufacturing cost and convenience. The testing and starting lever, covered by patent 1,101,906, is an improvement of higher order. But the validity of these patents is not in question. The Splitdorf Company admits estoppel to deny validity of either of them. Nor does it deny that it has made and sold ignition equipments covered by the claims of these patents.

Milton's Duplicity.

John L. Milton, whose failures had been turned into success by Kane in 1909, apparently felt chagrined at Kane's accomplishment. He did not question Kane's inventorship at the time the invention was made, but evolved an insidious plan for securing to himself the benefits of Kane's invention. It was not difficult for him to prevail on Mr. Webster, who left the decision in patent matters to Milton and other associates, to advise Kane that his invention was unpatentable (R. Vol. 1, 256). Milton then, secretly, on October 28, 1909, applied for a British patent covering Kane's invention (R. Vol. 3, 397). Possibly he applied in Great Britain, and not at that time in the United States, because the British patent law, unlike that of the United States, does not require an applicant for patent to make oath as to his inventorship. At any rate, he filed in Great Britain on October 28, 1909, and then exactly one year later filed in

the United States an application which eventuated in his patent No. 1,096,048, dated May 12, 1914 (R. Vol. 3, 866). He applied for the United States patent through the Webster Company's attorneys and later sold a number of his patents, including this one, to the Webster Company for \$25,000. Mr. Webster testified that he bought Milton's patents on the advice of his attorneys (who knew nothing of Milton's duplicity) and that he did not know what Milton's patents purported to cover; that he was advised to buy them, and that he did so (R. Vol. 1, 352).

The Kane-Milton Interference.

The inventor Kane was not convinced that his unitary equipment was not patentable and on the advice of his father (R. Vol. 1, 256, 310) he filed on February 2, 1910, an application (R. Vol. 2, p. 501) through the office of Mr. Sprinkle, a Chicago patent attorney. The Webster Company knew nothing about the filing of this application. Kane left the Webster Company in the fall of 1910 (R. Vol. 1, 240). Mr. Sprinkle's firm prosecuted this Kane application without any success, so far as securing the allowance of claims was concerned, until Milton's patent issued on May 12, 1914. Kane noticed the Milton patent in the "Official Gazette" of the Patent Office, and his attorneys promptly presented Milton's claims in the Kane application, and proposed to contest the question of priority with Milton. But the Patent Office required that Kane present Milton's claims in a so-called divisional application which was duly filed on January 14, 1915. An interference was declared between Kane and Milton, Kane being the senior party by virtue of his original filing date of February 2, 1910, Milton's United States application having been filed on October 28, 1910. The Web-

ster Company's attorneys, believing Milton to be the real inventor, had the burden of proof in the interference placed on Kane by moving that Milton be given the benefit of his British filing date (R. Vol. 2, 411).

But when the Webster Company's attorneys commenced to look for evidence to support Milton's side of the interference, they found, as later did Judge Sanborn in this case, that Kane, and not Milton, was the actual inventor. There was nothing for the Webster Company to do but to buy Kane's rights, which it did for \$12,000 in April, 1916 (R. Vol. 1, 372).

The Kane-Milton interference was terminated by an award of priority to Kane. The Webster Company does not in any way rely upon the Patent Office decision in the Kane-Milton interference because the proceedings necessary to bring about a proper termination of the interference were handled solely by its attorneys. To the contrary, the Webster Company offered in this suit evidence which (as Judge Sanborn said) proves "*overwhelmingly*" that Kane, and not Milton, was the original inventor.

The Kane-Podlesak Interference.

Another interference, the Kane-Podlesak interference involved the Kane application filed January 14, 1915, which was a division of the original application filed February 2, 1910, and also the Podlesak reissue patent granted on February 9, 1915. (See Defendant's Exhibit 56, R. Vol. 3, 940.) The original Podlesak patent No. 1,055,076, granted March 4, 1913, contained no claims relating in any way to the unitary magneto ignition equipment. On February 9, 1915, however, the Podlesak patent was reissued as No. 13,878. The claims which appeared for the first time in the reissue patent were directed to those improvements in the Kane equipment which Podlesak ad-

mittedly did not make until he entered the employ of the Webster Electric Company and *after* the Kane equipment was on the market (R. Vol. 1, 411). Those new claims, however, were so phrased as to seem susceptible of being interpreted to cover more than the Podlesak improvements. In order to make sure that the new claims of the Podlesak reissue patent were limited to the Podlesak improvements and were not broad enough to cover the Kane invention, Kane's personal attorneys inserted the new claims in his divisional application on April 19, 1915, and asked for an interference with the Podlesak reissue patent (R. Vol. 2, 634). Webster Electric Company had no interest in the Kane application until a year later (R. Vol. 1, 217). At the same time Kane's personal attorneys inserted three other claims that were repeated in the Podlesak reissue patent from the original patent and which, in the light of the reissue, seemed to take on new significance. These three claims, however, were discarded and were not involved in the final decision of the interference.

Since the Kane divisional application was based on precisely the same disclosure as the original application filed February 2, 1910, and since Podlesak admitted in his preliminary statement that he did not invent his improvements until November, 1910, the Examiner ruled that judgment would be entered for Kane on the record unless Podlesak showed cause to the contrary. In reply Podlesak moved to dissolve the interference on the ground that the new claims in the Podlesak reissue patent were strictly limited to Podlesak's detailed improvements on the underlying Kane invention, and on the further ground that Kane was estopped to make the claims because he had delayed too long in asking for them. Podlesak's motion was denied and an order of priority in favor of Kane was entered by the Examiner of Interferences.

In successive appeals by Podlesak or Kane, no two tribunals of the Patent Office agreed on any point involved and the case finally came before the Court of Appeals for the District of Columbia. That court held that if it were necessary, it would agree with the Commissioner's decision that the new claims in the Podlesak reissue patent were limited to the details of the Podlesak improvements. But following the authority of its own then very recent decisions in *Rowntree v. Sloan*, 45 App. D. C. 207, and *Wintroath v. Chapman*, 47 App. D. C. 428, it placed its decision in favor of Podlesak, however, on the ground that Kane was estopped to make the claims because he had not presented them until two years and one month after the issue of the original Podlesak patent. Such was the ruling despite the fact that these claims did not appear in the original Podlesak patent, and despite the fact that Kane made them within two months after the grant of the reissue patent in which the claims appeared for the first time. This decision, of course, was made before the Supreme Court reversed the decision in *Wintroath v. Chapman*.

Patent Claims Involved.

The following claims are involved:

Kane patent No. 1,280,105, claims 7 and 8*.

Podlesak reissue No. 13,878, claims 1, 2, 3, 7, 8, 9, 15, 21 and 22.

Podlesak patent No. 1,101,956, claims 1, 2, 3, 6, 7, 11 and 12.

The respondent (defendant) does not deny that claims

* Judge Sanborn found claim 3 of the Kane patent valid and infringed, but the Court of Appeals found it not infringed without disturbing its validity. We believe Judge Sanborn was right, and the Court of Appeals wrong, but claim 3 is relatively unimportant, not being directed to the essence of Kane's invention. Hence, to simplify the issues, we shall not discuss its infringement in this brief.

7 and 8 of the Kane patent are infringed, if valid. Neither does it deny that the Podlesak claims are valid and descriptive of devices made and sold by the defendant.

Respondent's Contentions.

The Splitdorf Company urged many defenses in the courts below but the only ones which were considered by the courts below, or which we can conceive the respondent will urge in this court, are as follows:

1. *That the doctrine governing patent office interference practice which was criticized and corrected by the Supreme Court in Chapman v. Wintroath, 252 U. S. 126, and the language employed by Mr. Justice Clarke in that decision, afford grounds for vitiating claims 7 and 8 (the generic claims) of the Kane patent.**

NOTE: The Court of Appeals has held claims 7 and 8 of the Kane patent invalid because the Court of Appeals believes Kane did not present his divisional application, or perhaps more particularly claims 7 and 8 thereof, in compliance with the aforesaid doctrine, and because the said Court of Appeals thought it found in the language of Mr. Justice Clarke justification for holding claims 7 and 8 invalid merely because not formulated and submitted to the Commissioner of Patents until rather late in the course of a long but most vigorous prosecution of the application which eventuated in the Kane patent.

The holdings of the Court of Appeals in this connection are most startling, and if correct will invalidate a very large percentage of all United States patents now

* See page 46, *infra*, for an enumeration of the novel defenses under this heading.

in existence. The writ of certiorari to review these holdings was wisely invoked by your Honors.

Counsel for the Splittdorf Company, in reply to the petition for certiorari, endeavored to lead your Honors to believe that the holding of the Court of Appeals, that Kane's right to claims 7 and 8 was barred by laches in their formulation and submission, was based, not on *Chapman v. Wintroath*, *supra*, but, to the contrary, upon *Railway Company v. Sayles*, 97 U. S., 554. The Court of Appeals *did not even mention Railway Company v. Sayles* in its opinion. Its decision was based solely upon what it conceived to be the law announced by the Supreme Court in *Chapman v. Wintroath* (252 U. S. 126).

Counsel for the Webster Company believe that the Court of Appeals incorrectly construed your Honors' decision in *Chapman v. Wintroath*, and fell into error through failure to consider the *patent statutes* and such Supreme Court cases as *U. S. v. American Bell Telephone Co., et al.*, 167 U. S., 224.

2. *That claims 7 and 8 of the Kane patent are void for lack of patentable invention.*

NOTE: This contention has been rejected by both of the courts below.

3. *That the Webster company is estopped, by contract D, from asserting the Kane patent against the Podlesaks and their assignees.*

NOTE: This alleged defense to the Kane patent was not recognized by either of the courts below. Its consideration demands an *interpretation* of the contract here in issue.

4. *That John L. Milton (another employee of the Webster Company) was the originator of the invention of the Kane patent.*

NOTE: The trial court rejected this contention in most forceful language, saying "the proof shows that Kane

is *beyond reasonable doubt* the first inventor." The Court of Appeals did not disturb this finding of fact.

5. *That the Splitdorf Company and its co-defendant, the Sumter Company, are immune from suit under the Podlesak patents.*

NOTE: The trial court found this contention to be entirely without merit, but the Court of Appeals was impressed by and gave it sanction.

The decision of the Court of Appeals on this phase of the case deprives the Webster Company of every right which it ever sought or needed under the Podlesak patent 1,101,956 and reissue 13,878, and has placed it in a deplorable situation where its only formidable competitor, the Splitdorf Company, may sap its vitality and destroy it.

The Court of Appeals has admitted that its only opinion (the first opinion), in which this phase of the case was considered, was largely in error. We feel that the conclusions of the Court of Appeals on the contract question were as ill considered as were its conclusions, set forth in the same opinion, with respect to the question of patentable novelty.

The decision of the Court of Appeals with respect to the contract question should be reviewed along with the questions pertaining to the Kane patent.

First: Because the contract question is a simple one but most vital, so far as the existence of the Webster Company is concerned.

Second: Because, on the face of the record, the presumption in favor of the correctness of the trial court's decision is greater than that in favor of the decision of the Court of Appeals.

Third: Because a determination of the contract question will not require your Honors to consider any disputed facts.

The Opinions of the Courts Below.

THE OPINION OF THE TRIAL COURT.

(R. Vol. 1, 797.)

The trial of this case occupied upwards of two weeks. The court had the benefit of full arguments on each side. Three counsellors presented the case of the defendant corporations.

The trial judge, the late Arthur L. Sanborn, saw and heard all of the witnesses and had ample opportunity carefully to consider the evidence and arguments and to arrive at his conclusions. His findings of fact should be regarded as conclusive. His conclusions with regard to matters of law are entitled to the greatest respect because of his great experience and generally recognized ability, and because of the unusual opportunity which he had to consider and decide the questions involved in the instant case.

Judge Sanborn in a carefully considered opinion resolved all of the material issues against the defendant corporations. He found claims 7 and 8 of the Kane patent valid and infringed, determined that the defendant corporations had infringed the Podlesak patents, No. 1,101,956, and reissue No. 13,878, and found them enjoined from such infringement.

THE OPINIONS OF THE COURT OF APPEALS.

(First opinion, R. Vol. 1, 835—Second opinion, R. Vol. 1, 918.)

Two hearings were had in the Court of Appeals, and two opinions were rendered by that court.

The Court of Appeals and counsel were unquestionably handicapped by the size of the record herein and

the relatively short periods available for oral argument.

In its first opinion, the Court of Appeals found claims 7 and 8 of the Kane patent invalid *for want of invention*, and held the Splitdorf Company to be immune from suit for infringement of the Podlesak patents, No. 1,101,956 and reissue No. 13,878.

A rehearing was sought and granted, but was limited to the issues involving claims 7 and 8 of the Kane patent. In its second opinion, the Court of Appeals *admitted error* in its first opinion, found that claims 7 and 8 of the Kane patent do describe *a meritorious invention*, but then, to the consternation of the Webster Company, and we think to the great surprise of all counsel concerned, proceeded to hold these claims void for reasons hitherto unrecognized in American patent litigation!

The second opinion of the Court of Appeals finds claims 7 and 8 of the Kane patent void, *firstly*, because Kane failed to file his *divisional* patent application soon enough after the grant of one of the Podlesak patents which disclosed but did not claim the invention of claims 7 and 8 of the Kane patent; and, *secondly*, because Kane did not (and we shall show could not) formulate and present claims 7 and 8 to the Patent Office until after his invention had been in public use for some years.

The Court of Appeals professes to find authority for these holdings in the Supreme Court decision in *Chapman v. Wintroath* (252 U. S. 126).

With reference to Kane's supposed failure to file his *divisional application* in time, the Court of Appeals said:

"Kane's original application for patent No. 1,204,573 was filed **February 2, 1910** and was allowed November 14, 1916. The divisional application was filed **January 14, 1915** and allowed September 24, 1918. Milton's patent No. 1,096,048

was applied for October 28, 1910 and allowed May 12, 1914. . . .

"The Podlesak reissue patent No. 13,878 was issued February 9, 1915, upon application filed December 23, 1914, the original patent being No. 1,055,076, issued **March 4, 1913.** . . .

"In support of the contention that section 4886 R. S. requires a divisional application to be filed within two years from the allowance and publication of a patent covering the same claims, appellant cites *Chapman v. Wintroath*, 252 U. S. 126. Subsequent to the filing of the original brief, the following additional authorities were submitted, all based upon the views expressed in *Chapman v. Wintroath*. *De Ferranti v. Harmatta*, 273 Fed. 357; *Ransdall v. Jahns*, 273 Fed. 365; *Repogle v. Kirby*, 269 Fed. 862; *Wells v. Honigman*, 267 Fed. 743. Our attention has been called to no case holding the contrary and we have found none upon independent investigation.

"True, the precise question here presented was not squarely raised and therefore not decided in *Chapman v. Wintroath*. In that case the divisional application was denied (no hearing was had and no evidence was received) solely on the ground that it was not made within *one year* from the date of the allowance of a patent covering the same claims to another. Appellants contend, however, and we agree with the courts that have passed upon the question that the effect of the holding, is to fix the period, during which such **application** must be filed, at two years from the date of the issuance of the **other patent**. No other deduction can fairly or logically be drawn from the discussion of the question in that opinion." (Bold face ours.)

The Court of Appeals applied the "two year rule" to the instant case upon the false premise that **two years** elapsed between **March 4, 1913**, and **January 14, 1915**.

Kane's divisional application was filed on **January 14, 1915**, well within TWO YEARS after the grant of the **other patent** disclosing the Kane invention. The **other patent** to which the Court of Appeals referred was the

original Podlesak patent, No. 1,055,076, issued **March 4, 1913**, which was subsequently reissued as No. 13,878 here in suit. Of course, the time which elapsed between the grant of Podlesak's patent of **March 4, 1913**, and the filing of Kane's divisional application on January 14, 1915, was only **twenty-two months and ten days**.

The decision of the Court of Appeals, insofar as it relates to the "two year rule" could be disregarded by your Honors as being based upon an obviously false premise (*i. e.*, that Kane filed his divisional application two years after the issuance of Podlesak's patent No. 1,055,076) were it not for the fact that Kane's invention was in *public use* during the pendency of his original application and two years before the filing of his divisional application. The merit of the invention and the public demand for it made this necessary.

If the Court of Appeals is right as to the legal proposition that a patent granted on a divisional application is invalidated by a patent (illustrating the same invention) issued during the pendency of the original application but two years before the filing of the divisional application, then a question immediately arises as to whether or not the Kane patent is invalid because the Webster Company was supplying the public demand for Kane's invention during the pendency of Kane's original application but two years before his divisional application was filed.

Section 4886 of the Revised Statutes, the basis of our patent system, recognizes three *bars* to the grant of a patent. If an invention is *patented*, or *described in any printed publication*, or in *public use in this country* more than two years before *application* for a patent thereon, no valid patent can be granted. If there is any justification for the proposition that a divisional application rests solely on its own bottom, insofar as one of the

recognized statutory bars is concerned, it seems clear that it stands in like relation to the others.

If the decision of the Court of Appeals herein is not corrected, it will stand as a precedent for the new and starting proposition that a divisional application does not benefit by the filing date of the original application from which it is carved. The administration of our patent laws will necessarily undergo a revolutionary change and thousands of valuable patents, many of which have been adjudicated and found valid, will have the stamp of invalidity placed upon them.

Already has one United States Court regarded the Court of Appeals decision herein as a precedent for the revolutionary proposition just mentioned. Judge Cooper, of the United States District Court for the Northern District of New York, has declared the Supreme Court decision in *Chapman v. Wintroath*, as interpreted by the Seventh Circuit Court of Appeals in the instant case, to be authority for the proposition that the two year limitations (statutory bars) recognized by R. S. 4886 apply "to a divisional, as well as an original application." Judge Cooper's opinion* is as yet unpublished, but appears in full at page 50 of the addendum to this brief.

As before indicated, the Court of Appeals professes to find in the Supreme Court case of *Chapman v. Wintroath* authority for holding claims 7 and 8 of the Kane patent void for reasons aside and apart from any "two year rule." The Court of Appeals said:

"But we are not required to rest our decision solely upon the two year period fixed by the statute.

* We have just learned that Judge Cooper has been reversed by the Second Circuit Court of Appeals in an opinion reproduced on page 52 of the Addendum hereto.

Laches may arise and become an effective bar to relief under a variety of circumstances. Laches is based upon delay and delay is a relative term.

"In the last paragraph of the opinion in *Chapman v. Wintroath* we find the court referring to laches other than that defined and fixed by the statute *by calling attention to the absence of any evidence in the case under consideration that would warrant any such finding.* . . .

"Turning to the facts in the present case and for the moment ignoring any two-year rule, we find Kane's position in support of claims 7 and 8 untenable." (Italics ours.)

It appears at once that the Court of Appeals took a mere *dictum* from the language of Mr. Justice Clarke and, construing this *dictum*, regarded it as authority for holding Kane's patent void regardless of any "two year rule."

The Court of Appeals in considering the incident that claims 7 and 8 were not formulated and presented in Kane's application until shortly before it issued, apparently overlooked the fact that Kane at all times during the pendency of his original and divisional applications was fighting for claims wherewith adequately to protect his invention.

The Court of Appeals then, apparently for good measure, proceeded to criticise Kane (a) because at the time he filed his original application he did not fully realize that *invention* had been exercised in the production of the structure eventually described in claims 7 and 8; (b) for becoming involved in interference with Milton and Podlesak, and (c) for cancelling certain claims (the counts of the Kane-Podlesak interference) which the Court of Appeals for the District of Columbia had held were too narrow in scope to be readable upon Kane's structure.

These criticisms, even if justified, as we say they are

not, are nothing more than *criticisms*. Neither individually nor collectively are they grounds for destroying claims 7 and 8.

For the Court of Appeals to criticise Kane for failing fully to appreciate the *inventive merit* of the important part of his structure when he filed his original application, is really ludicrous in view of the history of this litigation. The Court of Appeals, in its first opinion, failed to recognize *inventive merit* in the structure of claims 7 and 8, even after its intrinsic merit and commercial success had been demonstrated. Kane has been criticised because his foresight in 1910 was not better than the hindsight of the Court of Appeals in 1921. Unrecognized by the Court of Appeals are the many authoritative decisions* to the effect that the failure of an inventor fully to appreciate the merit or the uses of his invention is no basis for destroying his patent when the latter illustrates and adequately claims his invention.

In criticising Kane for becoming involved in interferences with Milton and Podlesak, the Court of Appeals overlooks the fact that such proceedings are mandatory under the provisions of Section 4904 of the Revised Statutes. Milton's claims unquestionably described Kane's structure, and both Kane and the Patent Office Examiner believed that Podlesak's claims did likewise. Under such circumstances, it was necessary that Kane go into the interferences with Milton and Podlesak. If he had not done so, the Patent Office would not have allowed Kane a claim broad enough to protect *his invention* against unauthorized use in the forms illustrated by Milton and Podlesak.

In cancelling the counts of the Kane-Podlesak inter-

* See Grant Tire case, 220 U. S. 428.

ference from his application, Kane pursued the only course which was open to him. The court of last resort in the chain of Patent Office appeals had held that Podlesak's claims were too narrow to be made by Kane. This point having been definitely settled, Kane was then free to claim his invention as broadly as the prior art would warrant. Until the Court of Appeals for the District of Columbia held that no interference in fact existed between Kane and Podlesak, it was not possible for Kane, under the Patent Office rules, to secure a claim dominating the Podlesak structure, notwithstanding the undeniable fact that Podlesak was a mere improver upon Kane.

Stripped of its superfluities, that part of the decision of the Court of Appeals which purports to treat of the subject of "laches" is nothing more than an affirmative answer to the first question presented by the application for certiorari herein, which is:

"When a patent covering a novel invention of merit is issued in full compliance with the statutes, may it be held invalid for either of the following reasons:

"(a) Because the patentee's invention was put in public use *during the pendency of his application*, but two years before he formulated an allowable claim properly defining his actual invention.

"(b) Because the invention was disclosed, but *not claimed*, in patents *issued during the pendency* of his application, but two years before he formulated an allowable claim to his invention."

The difficulty with this part of the decision of the Court of Appeals is that it fails to recognize the fundamental proposition, so well set forth by the Supreme Court in *U. S. v. American Bell Telephone Company*, 167 U. S. 224, that the conduct of an applicant in the Patent Office is of no avail against the validity of his patent when issued, if he has complied with the requirements

of the statutes pertaining to the filing and prosecution of patent applications.

The conduct in the Patent Office of the patentee whose patent was involved in *U. S. v. American Bell Telephone Company*, was truly reprehensible, and contrary to the public good, but when the Supreme Court found that he had complied with the statutory requirements pertaining to the filing and prosecution of patent applications, his patent was held valid, even when *directly* attacked by the sovereign power which granted it. Kane's history in the Patent Office was in some respects unfortunate and long drawn out, but we submit that the records of his application show nothing but continuous and persistent effort to secure a patent covering that which he regarded as justly his. If Berliner's reprehensible conduct in the Patent Office (in the case of *U. S. v. American Bell Telephone Company*) could not be invoked to destroy his patent, even when it was attacked in a direct action brought by the Government of the United States for that purpose, *a fortiori*, the Splitdorf Company cannot, in a *collateral* attack on Kane's patent, rely upon delays in the Patent Office which were unavoidable or which might be attributed to the exercise of poor judgment on the part of Kane or the Patent Office Examiners.

The Court of Appeals has failed to point out how, in any respect, Kane failed to comply with the statutes pertaining to the filing and prosecution of patent applications. Failing so to do, its decision finding claims 7 and 8 of the Kane patent to be void, because of delay in their formulation and presentment to the Commissioner of Patents, must be regarded as erroneous.

The Pertinent Statutes.

The monopoly of a United States patent is created by statutes and can be destroyed only upon statutory grounds. No United States patent has ever been held *invalid* for any reason not recognized by the statutes creating it. The novel defenses urged against the Kane patent are clearly of no avail unless they find recognition in the statutes under and by virtue of which the patent was granted.

The pertinent sections of the statutes are as follows:

A. *As to the two-year period.*

“Sec. 4886. Any person who has invented or discovered any new and useful art, machine, manufacture, or composition of matter, or any new and useful improvements thereof, not known or used by others in this country, before his invention or discovery thereof, and not patented or described in any printed publication in this or any foreign country, before his invention or discovery thereof, or more than two years prior to his *application*, and not in public use or on sale in this country for more than two years prior to his *application*, unless the same is proved to have been abandoned, may, upon payment of the fees required by law, and other due proceeding had, obtain a patent therefor.”

Since the leading Supreme Court cases which relate to divisional patent applications, were rendered under earlier statutes, it is desirable to have in mind the provisions for the two-year period in the earlier statutes so that the applicability of the earlier decisions may be apparent.

The sections of the Patent Act of 1836, corresponding to present R. S., Sec. 4886, quoted above, provided in Section 6 that a patent might be granted to

“any person or persons, having discovered or invented any new and useful art, machine, manufac-

ture or composition of matter or any new and useful improvement on any art, machine, manufacture or composition of matter, not known or used by others before his or their discovery or invention thereof, and not *at the time of his application for a patent* in public use or on sale, with his consent or allowance, as the inventor or discoverer”;

and further provided in Section 7 that a patent shall be granted if it does not appear that the invention

“had been invented or discovered by any other person in this country prior to the alleged invention or discovery thereof by the applicant, or that *it had been patented or described in any printed publication in this or any foreign country or had been in public use or on sale with the applicant's consent or allowance prior to the application.*”

Section 7 of the Act of 1839 modified this by providing that—

“No patent shall be held to be invalid by reason of such purchase, sale or use prior to the application for a patent as aforesaid, except on proof of abandonment of such invention to the public, or *that such purchase, sale or prior use has been for more than two years prior to such application for a patent.*”

The quoted provisions of the Acts of 1836 and 1839 were subsequently combined in Section 24 of the Patent Act of 1870, the public use or sale that would constitute a statutory bar being further limited to one occurring “in this country.” Section 24 of the Act of 1870 is identical with present Section 4886 R. S., except that it does not include the two-year prior patenting or publication provisions corresponding to the two-year prior use provisions. These were inserted by the Act of March 3, 1897. Until the Act of 1897, prior patenting or publication was not a bar to a patent unless it occurred prior to the invention. *But ever since the Act of 1839, two-years public use or sale in this country prior to the filing*

of the application has been a bar to a patent. The Act of 1897 merely put the two defenses on the same footing. Therefore Supreme Court decisions rendered prior to 1897 and subsequent to 1839 with regard to two-year prior public use or sale have not been affected by statutory amendments, but to the contrary are applicable now to two years prior patenting or publication, which by the Act of 1897 was put on the same footing as public use or sale had been since 1839.

Section 4887, R. S., adds nothing to Section 4886 quoted above, so far as the provisions as to public use and sale, publication and prior patenting are concerned. The pertinent part of Section 4887 reads as follows:

“Sec. 4887 . . . But no patent shall be granted on an *application* for patent for an invention or discovery or a design which had been patented or described in a printed publication in this or any foreign country more than two years before the date of the *actual filing of the application* in this country, or which had been in public use or on sale in this country for more than two years prior to such filing.”

B. *As to renewed applications including so-called divisional applications.*

“Sec. 4903. Whenever, on examination, any claim for a patent is rejected, the Commissioner shall notify the applicant thereof, giving him briefly the reasons for such rejection, together with such information and references as may be useful in judging of the propriety of *renewing* his application or of altering his specification; and if, after receiving such notice, the applicant persists in his claim for a patent, with or without altering his specifications, the Commissioner shall order a re-examination of the case.”

In order that the pertinency of the early decisions relating to renewed (including divisional) applications

may be understood, it is desirable to have in mind the history of present Section 4903. Section 4903 was embodied in Section 42 of the Patent Act of 1870, and has been unchanged since that date. Prior thereto, Section 7 of the Patent Act of 1836, which contained substantially the same provisions, was effective.

Section 7 of the Act of 1836 provided:

“But whenever, on such examination, it shall appear to the Commissioner that the applicant was not the original and first inventor or discoverer thereof, or that any part of that which is claimed as new had before been invented or discovered, or patented or described in any printed publication in this or any foreign country as aforesaid, or that the description is defective and insufficient, he shall notify the applicant thereof, giving him briefly, such information and references as may be useful in judging of the propriety of renewing his application or of altering his specification, to embrace only that part of the invention or discovery which is new. In every such case, if the applicant shall elect to withdraw his application, relinquishing his claim to the model, he shall be entitled to receive back twenty dollars, part of the duty required by this Act, on filing a notice in writing of such election in the Patent Office. . . . But if the applicant shall persist in his claims for a patent, with or without any alteration in his specifications, he shall be required to make oath or affirmation anew in manner aforesaid.”

It is under these provisions for *renewed* applications that divisional or continuing applications always have been regarded as a part of the original application. Applications renewed under present Section 4903 R. S., (and formerly under Section 7 of the Act of 1836) have always been called “continuing” or “divisional” applications to distinguish them from applications renewed after forfeiture for failure to pay the final fee pursuant to R. S., Section 4897 (page 45, *infra*). The latter, with which we are not here concerned, are generally referred to as “renewed” applications.

There are not, and never have been, any special statutory provisions for *divisional applications* as distinguished from *other renewed applications*. But the Commissioner of Patents exercising the authority granted to him by Section 483 of the Revised Statutes "to establish regulations not inconsistent with law for the conduct of proceedings in the Patent Office" has adopted the following rule with reference to the division of patent applications:

"If several inventions, claimed in a single application, be of such nature that a single patent may not be issued to cover them, the inventor will be required to limit the description, drawing and claim of the pending application to whichever invention he may elect. The other inventions may be made the subjects of separate applications, which must conform to the rules applicable to original applications. If the independence of the inventions be clear, such limitations will be made before any action upon the merits; otherwise it may be made at any time before final action thereon, in the discretion of the examiner. A requirement of division, will not be repeated without the written approval of a law examiner. After a final requirement of division the applicant may elect to prosecute one group of claims, retaining the remaining claims in the case with the privilege of appealing from the requirement of division after final action by the examiner on the group of claims prosecuted." (Rule 42.)

C. *As to pleading the two-year period as a defense.*

"Sec. 4920. In any action for infringement the defendant may plead the general issue, and, having given notice in writing to the plaintiff or his attorney thirty days before, may prove on trial any one or more of the following special matters:

"Third. That it has been patented or described in some printed publication prior to his supposed invention or discovery thereof, or more than two

years prior to his application for a patent therefor; or

“Fifth. That it had been in public use or on sale in this country for more than two years before his application for a patent, or had been abandoned to the public.

“And in notices as to proof of previous invention, knowledge or use of the thing patented, the defendant shall state the names of the patentees and the dates of the patents, and when granted, and the names and residences of the persons alleged to have invented or to have had prior knowledge of the thing patented, and where and by whom it had been used; and if any one or more of the special matters alleged shall be found for the defendant, judgment shall be rendered for him with costs. And the like defenses may be pleaded in any suit in equity for relief against an alleged infringement; and proofs of the same may be given upon like notice in the answer of the defendant, and with the like effect.

The history of the “two-year” provision in Section 4920 has paralleled precisely that of the two-year provision in Section 4886 above discussed (see Sec. 15, Act of 1836; Sec. 7, Act of 1839; Sec. 61 of the Act of 1870; Sec. 2 of the Act of Mar. 3, 1897).”

D. *As to the declaration of interferences.*

“Sec. 4904. Whenever an application is made for a patent which, *in the opinion of the Commissioner*, would interfere with any pending application, or with any unexpired patent, he *shall* give notice thereof to the applicants, or applicant and patentee, as the case may be, and *shall* direct the primary examiner to proceed to determine the question of priority of invention. And the Commissioner may issue a patent to the party who is adjudged the prior inventor, unless the adverse party appeals from the decision of the primary examiner, or of the board of examiners-in-chief, as the case may be, within such time, not less than twenty days, as the Commissioner shall prescribe.”

E. *As to the prosecution of patent applications.*

"Sec. 4894. All applications for patents shall be completed and prepared for examination within one year after the filing of the application, and in default thereof, or upon failure of the applicant to prosecute the same within one year after any action therein, of which notice shall have been given to the applicant, they shall be regarded as abandoned by the parties thereto, unless it be shown to the satisfaction of the Commissioner of Patents that such delay was unavoidable."

F. *As to applications renewed after forfeiture.*

"Sec. 4897. Any person who has an interest in an invention or discovery, whether as inventor, discoverer, or assignee, for which a patent was ordered to issue upon the payment of the final fee, but who fails to make payment thereof within six months from the time at which it was passed and allowed, and notice thereof was sent to the applicant or his agent, shall have a right to make an application for a patent for such invention or discovery the same as in the case of an original application. But such second application must be made within two years after the allowance of the original application. But no person shall be held responsible in damages for the manufacture or use of any article or thing for which a patent was ordered to issue under such *renewed* application prior to the issue of the patent. And upon the hearing of *renewed* applications preferred under this section, abandonment shall be considered as a question of fact."

G. *As to the jurisdiction of the Court of Appeals for the District of Columbia in interference cases.*

Act of Feb. 9, 1893, ch. 74; 27 Stat. L., 434.

"Sec. 9. That the determination of appeals from the decision of the Commissioner of Patents, now vested in the general term of the Supreme Court of the District of Columbia, in pursuance of the pro-

visions of Section seven hundred and eighty of the Revised Statutes of the United States, relating to the District of Columbia, shall hereafter be, and the same is hereby, vested in the Court of Appeals created by this act; and in addition any party aggrieved by a decision of the Commissioner of Patents in any interference case may appeal therefrom to said Court of Appeals."

ARGUMENT.

The Novel Technical Defenses to the Kane Patent Which Are Said to Have Been Recognized By the Supreme Court In Chapman v. Wintroath.

These defenses, as we understand them, are as follows:

1. That the bars to the grant of a patent which are recognized by Section 4886 R. S. apply to a *divisional* as well as an *original* application; that Kane's patent is invalid because he permitted his invention to go into public use two years before the filing of his *divisional* application *but not two years before* the filing of his *original* application.

2.* That Kane's claims 7 and 8 are void because not presented in his regularly pending divisional application within two years after the occurrence of either or both of the following:

A. Public use and sale by Kane and his assignee occurring for the first time less than one year prior to the filing of the original application on February 2, 1910.

B. The issuance, during the pendency of the original application, of the patents to Milton and Podlesak who did not invent and did not claim the invention in question.

* See foot note page 47.

3.* That Kane was allowed claims 7 and 8 in violation or disregard of the "two year rule" pertaining to Patent Office interference practice, which was criticised and corrected by the Supreme Court in *Chapman v. Wintroath*.

Kane's Patent Granted On a Divisional Application Is Entitled to All of the Benefit of the Filing Date of the Original Application Filed February 2, 1910.

(ANSWER TO THE FIRST OF THE NOVEL TECHNICAL DEFENSES.)

The Kane patent in suit was granted on an application filed January 14, 1915, as a division of a *then pending* original application filed well within two years after the occurrence of any statutory bar. Respondent's contention that Kane's patent is invalid by statutory bars not applicable to the original application is clearly based upon a misunderstanding of the Supreme Court decision in *Chapman v. Wintroath*.

In the Court of Appeals, counsel for the respondent in referring to the Supreme Court decision in *Chapman v. Wintroath* said:

"It would seem inevitable, from the reasoning of its opinion, that it [Supreme Court] will hold, when the question comes squarely before it for decision, that a divisional application, like an original application, must stand on its own bottom and be judged by its own date with respect to the statutory defenses applicable to the date of filing an application. . . ."

* The sufficiency of the second and third of the technical defenses stated above was directly challenged by the petition for certiorari herein. We understand that counsel for the Splitdorf Company, encouraged by Judge Cooper's revolutionary decision (addendum page 50) are intending to urge the first of the above defenses in this court. Judge Cooper has recently been reversed (addendum page 52). As a consideration of the second and third of said defenses will be simplified when the first defense has been demonstrated to be without merit, we shall consider the said defenses in the order above stated.

This is a startling argument in view of the decisions which, from the very inception of our patent system, uniformly have held that a divisional application must be judged as if filed on the date of the filing of the original application of which it is a division.

The leading Supreme Court case on this subject is *Godfrey v. Eames* (1863), 1 Wall., 317, 324. In holding that the patentee was entitled to the date of his original application for the purpose of overcoming two years' public use prior to the filing of a renewed (divisional) application, the Supreme Court said:

"In this case the patentee filed his application in the Patent Office on the 31st of January, 1855, and from that time it was constantly before the office, until the patent was issued on the 2nd of March, 1858, except that on the 24th day of April, 1857, it was withdrawn and refiled on the same day with an amended specification. It was admitted and proved 'that the patentee, in the summer and fall of 1854, and since, publicly manufactured and sold boot-trees containing his alleged invention.' The sales and use as thus shown were less than two years before the first application was filed and hence, according to the letter of the act of 1839* cannot affect the validity of the patent.

"In answer to this, two propositions are relied upon by the plaintiff in error:

"1. It is said the original and the renewed application are for patents for different things.

"Both specifications are before us, and it is our duty to construe them.

"The act of 1836† gives the applicant a right to change his specification after receiving the suggestions of the Commissioner. Doubtless, this right exists and may be exercised independently of such suggestions, at any time before the Commissioner has given his formal judgment upon the application; and the inventor may 'persist in his application for

* See quotation from Act of 1839, *supra*, page 40.

† See quotation from Act of 1836, *supra*, page 39.

a patent, with or without any alteration of his specification.' A change in the specification as filed in the first instance, or the **subsequent filing of a new one whereby a patent is still sought for the substance of the invention as originally claimed, or a part of it, cannot in any wise affect the sufficiency of the original application or the legal consequences flowing from it.** To produce that result the new or amended specification must be intended to serve as the basis of a patent for a distinct and different invention, and one not contemplated by the specification, as submitted at the outset.

"We are satisfied that there was here such substantial identity in the two specifications as brings the case within the rule thus laid down. This objection cannot be sustained.

"2. It is said that the withdrawal of the first application broke the continuity of the claim, and that the case stands as if the only application were the one of the 24th of April, 1857.

"This question could not have arisen upon the same state of facts, under the act of 1836. According to that act, and the prior legislation of Congress, the public use or sale by the inventor of the thing invented, at any time before the application, was fatal to his claim for a patent. The act of 1839 relieved him from this consequence and introduced a new and more liberal policy. It gave him the right to apply for a patent at any time within two years after the use and sale of his invention, 'except on proof of the abandonment of such invention to the public.' The provision in the act of 1836,* allowing the withdrawal of the application, was intended only to provide for the disposition in such cases of the duty which had been deposited, and to enable the applicant to resume a part of it upon the condition prescribed; it is silent as to everything beyond this, and we do not feel authorized to interpolate into the statute so important a qualification. The new provision in the act of 1839, is wholly independent of the act of 1836; by necessary implication it repeals the conflicting provision upon the same subject in

* See quotation from Act of 1836, *supra*, page 39.

the earlier act. It must be examined by its own light, and so construed as to give the fullest effect to the beneficent purpose of the legislature.

“In our judgment, if a party choose to withdraw his application for a patent, and pay the forfeit intending at the time of such withdrawal to file a new petition, and he accordingly does so, the two petitions **are to be considered as parts of the same transaction, and both as constituting one continuous application, within the meaning of the law.**”

The rule established in the foregoing case has uniformly been followed.

In *Smith v. Goodyear Dental Vulcanite Co.* (1876), 93 U. S., 486, 500, the Supreme Court said:

“The remaining defenses to the bill rest mainly on the assumption that the new petition presented to the Patent Office in 1864 cannot be regarded as a continuation of the application made for a patent on the 12th of April, 1855. But this cannot be conceded. The history of the application, as we have given it, forbids such an assumption. No act of Cummings amounted to a withdrawal of his first petition, or to an acquiescence in its rejection. It is true, he filed a second petition in 1864; but he accompanied it with substantially the specification that remained in the office, and with the same drawings. It was a mode of procuring another consideration of his rejected claim; and the Commissioner regarded it as such. The act of March 2, 1861, gave him authority thus to regard it. He replied to the application, that his claim was embraced in an application filed by him in 1855, and rejected for want of novelty, admitted that it had been improperly rejected, and suggested an amendment to make it correspond with his former amended claim. It is impossible, in view of these facts, to regard the effort to obtain a new patent in 1864 as a new and independent application, disconnected from the application made in 1855. **It was but one stage in a continuous effort.** In *Godfrey v. Eames*, 1 Wall. 317, the first application was actually withdrawn, and a new petition was presented at the time of the with-

drawal, with a different description of the invention; but as the thing patented under the second might have been engrafted as an amendment of the first, it was ruled that all the proceedings constituted one application. This court said, 'If a party choose to withdraw his application for a patent, and pay the forfeit, intending at the time of such withdrawal to file a new petition, and he accordingly does so, the two petitions are to be considered parts of the same transaction, and both as constituting one continuous application.' **We are not aware that filing a second petition for a patent, after the first has been rejected, has ever been regarded as severing the second application from the first and depriving the applicant of any advantage he would have enjoyed had the patent been granted without a renewal of the application.** The contrary was decided by the Circuit Court for the Southern District of Ohio, in *Bell v. Daniels*, 1 Fish. 372, and in *Blandy v. Griffith et al.*, 3 *id.* 609; and these decisions are founded in justice and sound reason.

"If, then, as we think it must be held, the proceeding to obtain the patent was a continuous one from 1855 until it was granted; if the application of 1855 is not severable from the proceedings of 1864,—there is no foundation whatever for the allegation that the invention was abandoned to the public, and that it was in public use or on sale for more than two years before the inventor's application. The first use of it proved, by any other than Dr. Cummings, was in 1859; and there is no evidence that this was with his consent. And the proof respecting his health and pecuniary condition, together with his constant efforts to obtain the necessary means to prosecute his rights, rebuts all presumption that he ever abandoned, actually or constructively, either his invention or his application for a patent. That he never intended an abandonment of his invention is perfectly clear; and it was not his fault that granting the patent was so long delayed."

In *Smith Co. v. Sprague* (1887), 123 U. S. 249, 250, the Supreme Court said:

"The defenses relied on are, 1st, a denial of the

infringement alleged in respect to the fifth claim of patent No. 228,136 and the first and fourth claims of patent No. 231,199; and, as to all the other claims of both, that a machine embodying them **was in public use for more than two years prior to the application for patents.** The application for patent No. 228,136 was filed on November 11, 1879, while that for patent No. 231,199 was filed December 2, 1878, the two being **divisions** of an application based on the same model. The machines described in the two patents, it is admitted, are substantially the same in construction and operation, both patents being for different parts and combinations of a single machine. For the purposes of this case, therefore, the date of the application is to be taken as of December 2, 1878, being the earlier of the two.”*

And in the recent case of *Chapman v. Wintroath* (March, 1920), 252 U. S. 126, 137, the case on which our adversaries rely, the Supreme Court carefully reaffirmed this doctrine, saying:

“To this we must add that not only have later or **divisional** applications not been dealt with in a hostile spirit by the courts, but, on the contrary, designed as they are to secure the patent to the first discoverer, they have been favored to the extent that where an invention clearly disclosed in an application, as in this case, is not claimed therein but is subsequently claimed in another application, the original will be deemed a constructive reduction of the invention to practice and **the later one will be given the filing date of the earlier, with all of its priority of right.** *Smith & Griggs Manufacturing Co. v. Sprague*, 123 U. S. 249, 250; *Von Recklinghausen v. Dempster*, 34 App. D. C. 474, 476, 477; 154 O. G. 252.”

* This was the original application. The court referred to both applications as “divisions,” and properly so, because that which remains in an original application after division is made is just as truly a “division” of the divided transaction as is the later filed or recalled “divisional” application.

The inferior court cases are numerous and all to the same effect as to the Supreme Court cases.

Victor v. American, 145 Fed. 350 (2nd C. C. A.).

General v. Continental, 256 Fed. 660 (2nd C. C. A.).

Corrington v. Westinghouse, 173 Fed. 69 (Dist. Ct., N. D of N. Y.).

Heinz v. Cohn, 207 Fed. 547 (9th C. C. A.).

In *Rosenwasser v. B. E. Mfg. Co.*, 264 Fed. 114, the Second Circuit Court of Appeals quoted the following paragraph from Walker's authoritative text book on patents, as accurately expressing the law:

"Sec. 145. . . . Where an application covers two inventions, one of which is withdrawn therefrom by division, and made the subject of a divisional application, that new application relates back to the original application from which it was carved, and is not chargeable with any diminution of significance on account of the transaction."

The established practice of the Patent Office is set forth in a recent Commissioner's decision (January 6, 1922) in the case of *Lee et al. v. Vreeland*, 317 O. G. 234, in which appears:

"Under the settled practice of this office, a **divisional application takes its effective date from the date of the filing of the parent case**, and any publication subsequent thereto is not a bar to any claims in the divisional case which are supported by the disclosure of the earlier case, whether such matter was or was not claimed in such earlier application."

Counsel for the Webster Company respectfully submit that the patent statutes and all of the Supreme Court decisions relating to divisional patent applications, including the decision in *Chapman v. Wintroath*, repudiate respondent's assertion that the patent in suit

granted on Kane's regularly filed divisional application is invalidated by statutory bars not applicable to the original application from which the divisional application was carved.

Respondent's Contention That a Divisional Patent Application "Stands On Its Own Bottom" In Its Relation to the Statutory Bars Is Revolutionary, and If Approved Would Invalidate a Large Proportion of All Existing Patents and Delay the Future Development of New Inventions.

As we previously have pointed out, the decisions of the courts from early times uniformly have held that the *application* for a patent referred to in the statutes is the *original application*, and that a divisional application is to be construed as being a part of the original application insofar as the so-called statutory bars are concerned.

Under the authority of these decisions innumerable patents have been applied for, issued and sustained—patents which will become invalid if your Honors approve respondent's contention that a divisional application stands on its own bottom, deriving no benefit from its original application insofar as the statutory bars are concerned.

It has always been the policy of our patent law to encourage inventors to develop their inventions and make them available to the public as quickly as possible. Thus, the statutes provide that an inventor may file his application for patent any time within two years after his invention has been publicly used or been published in any way. American inventors, as a general rule, have not hesitated to develop their inventions and make them available to the public even in advance of

filing their patent applications—relying upon the recognized right of the original inventor to secure a valid patent on an application filed within two years after the first occurrence of any one of the so-called statutory bars.

If respondent's contention that a divisional application "stands on its own bottom" in relation to the statutory bars were to be adopted as the law, no reasonably careful inventor would permit a meritorious and patentable improvement to go into public use or become known in any way until after his patent or patents had actually issued. For, at any time during the pendency of his application, it might be necessary, or be considered by the Patent Office to be necessary, to divide it or file a renewed application, and in such event his disclosure and development work two years prior to such division or renewal would destroy his right to obtain protection. This is precisely the situation in which Kane will find himself in this case if respondent's contention is approved by this court. The inevitable effect of such a reversal of the established law as to the continuity of original and divisional or renewed continuing applications for the purpose of fixing the date of the two year statutory bars, would be to postpone the development of new inventions until patents for them actually issued. This would defeat the very purpose of Congress in adopting the two year provision, which, as the Supreme Court pointed out in *Godfrey v. Eames, supra*, was to enable the inventor safely to put his invention into use prior to filing his application.

The Validity of Kane's Claims 7 and 8 Is Not Affected by Any Public Use or Publication Occurring Subsequent to His Invention and Less Than Two Years Before the Filing of His Original Application on February 2, 1910.

(ANSWER TO THE SECOND OF THE NOVEL TECHNICAL DEFENSES.)

In their brief in the Court of Appeals, counsel for the Splitdorf Company made the following statements:

"Claims 7 and 8 of the Kane patent were introduced by an amendment filed June 17, 1918. These claims were directed to the same subject matter that was *disclosed* in the Podlesak patent of March 4, 1913, and they were based upon the identical construction which had been in public use and on sale in this country since the middle of the year 1909, and which was *disclosed in and covered* by Milton's British patent of that year. Their subject matter had, therefore, been patented and described in a printed publication more than eight years earlier, in the Milton British patent and more than five years earlier in the Podlesak patent, and had been in public use and on sale by plaintiff itself for practically nine years.

"It would seem clear, therefore, that under the reasoning and conclusions of the Supreme Court in *Chapman v. Wintroath* these claims cannot possibly be sustained in the Kane patent, even if their subject matter were otherwise patentable." (Italics ours).

We are unable to understand how counsel for the Splitdorf Company contrive to find, in *Chapman v. Wintroath*, any basis for the startling conclusion that a patent for a meritorious invention can be invalidated by any public use or publication (in a patent or otherwise) occurring subsequent to the patentees invention and less than two years before his application for patent.

Milton's British patent was applied for less than four months before the filing of Kane's original application

on February 2, 1910. The United States patents to Milton and Podlesak were applied for and issued during the *pendency* of Kane's original application. No one of these patents claim* the Unitary Magneto Ignition Equipment of Kane's claims 7 and 8. Neither Milton nor Podlesak was the inventor† of the subject-matter of these claims.

If the Milton and Podlesak patents have any standing in this case, it is merely as *publications* occurring during the *pendency* of Mr. Kane's patent applications. Public use of Kane's invention *less than two years* before his application was filed on February 2, 1910 is admitted.

Prior public use and prior publication of a patented invention are, and always have been considered, statutory defenses. They are two of the defenses recognized by Section 4920 of the Revised Statutes (page 43, *ante*). Hence, we must look to the patent statutes to determine when a public use or publication of an invention will invalidate a patent covering such invention.

In referring to Section 4886 of the statutes (page 39, *ante*) to determine the kinds of public use and publication which will bar an inventor's right to a patent, we find that the public use to be effective as a bar must occur "*more than two years prior to his application*," and that publication to be effective as a bar must also occur "*more than two years prior to his application*." So far as this section of the statutes is concerned, neither a public use nor publication constitutes a bar to a patent if it does

* We have heretofore explained that Milton's United States patent 1,096,048 and Podlesak's patent 1,055,076 did not claim the invention of Kane's claims 7 and 8. Milton's British claims are narrower than his United States claims. We do not believe that the validity of claims 7 and 8 would be affected even if Milton and Podlesak had claimed it. But we resent any attempt to confuse the issue by assertions that they did claim it.

† Judge Sanborn held, and the evidence herein establishes beyond doubt, that Kane and not Milton was the real inventor. Kane's originality as against Podlesak has never been questioned.

not occur more than *two years prior* to the *application* for the patent. There is nothing in this section of the statutes which affords the slightest basis for the proposition that a public use or publication occurring during the *pendency* of a patent application can invalidate a patent granted on such application.

Referring to Section 4887 of the statute (page 41, *ante*) which is specifically concerned with the effect of public use and publication, we find that no patent shall be granted for an invention if it has been "described in a printed publication in this or any foreign country more than two years *before* the date of the *actual filing* of the *application*." This section also provides that no patent shall be granted if the invention has been "in public use or on sale in this country for more than two years *prior to such filing*." There is nothing in this section of the statutes which in the slightest degree supports the contention that public use or publication of a patentee's invention, which occurred less than two years before his application for patent, can invalidate his patent. But to contend that publication or public use occurring during the *pendency* of the *application* invalidates the patent is obviously fallacious and is repudiated by this section of the statute.

Referring now to Section 4920 of the statutes (page 43, *ante*) which enumerates the special defenses which may be presented by a defendant who challenges the validity of a patent, we find that the defendant may contend with respect to the patentee's invention—

"That it had been patented or described in some printed publication prior to his supposed invention, or discovery thereof, or more than two years *prior* to his *application* for a patent therefor;"

or

"That it had been in public use or on sale in this country for more than two years *before* his *applica-*

tion for a patent, or had been abandoned to the public."

The above are the third and fifth defenses enumerated in Section 4920 of the statutes. They are the only ones of these defenses which are concerned with public use or publication. There is nothing in this section of the statutes which is, in any way, compatible with the proposition that public use or publication occurring *less* than two years prior to a patent *application* or during the *pendency* of the application, is a bar to the grant of a patent on such application.

The meaning of the herein discussed sections of the patent statutes is unmistakable. They have stood the test of the years, and constitute the bulwark of our patent system. Never has any court found in these statutes a basis for the proposition that a public use or publication of a patented invention, which occurs during the *pendency* of the application or *less* than two years prior to its filing, can constitute a bar to the patent granted thereon.

If the fact that Kane's claims 7 and 8 were not formulated and submitted to the Patent Office until more than two years after the public use of his invention, or its appearance in the Milton and Podlesak patents, then it must be held invalid upon the theory that the word "application" as it appears in Section 4886 R. S. (page 39, *ante*) means *submission of claiming clauses finally agreed upon between the applicant and the Patent Office*; and that the words "actual filing of the application" as used in Section 4887 R. S., means *actual submission of claiming clauses finally agreed upon between the applicant and the Patent Office*. These statutes state the only bars to the validity of a patent which are recognized by the statutes. If interpreted as respondent seeks to have them interpreted, they will be given a meaning heretofore unsuspected and one, we respectfully submit, which was

not intended by Congress when these statutes were enacted as the foundation of our patent system.

Congress in creating a patent system which provides for rigid examination of the claiming clauses of patent applications realized that in many cases much time would be consumed before claims could be formulated to determine the metes and bounds of a patent monopoly to the satisfaction of both the applicant and the Patent Office. Therefore, Congress wisely and justly stipulated that a patent should be judged, in its relation to the statutory bars, by the date of the *application* therefor and not by the date of submission of the particular claims appearing in the patent as issued.

Respondent's contention that claims 7 and 8 are invalid merely because not formulated and submitted in final form until June 17, 1918, is untenable because it finds no justification in the patent statutes.

"These are questions not of natural, but of purely statutory, right. . . . No court can disregard any statutory provisions in respect to these matters on the ground that in its judgment they are unwise or prejudicial to the interest of the public. . . ." (*U. S., v. American Bell Telephone Co., et al.*, 167 U. S., 224.)

Kane's Claims 7 and 8 Were Not Granted in Violation of the Two-Year Rule of *Chapman v. Wintroath*—Their Validity Would Not Be Impaired Had They Been So Granted.

(ANSWER TO THE THIRD OF THE NOVEL TECHNICAL DEFENSES.)

In *Chapman v. Wintroath*, the Supreme Court considered and corrected a mere rule or doctrine pertaining *solely* to *applicants* for patents involved in Patent Office interference proceedings instituted under Section 4904, R. S. (page 44, *ante*). The Court of Appeals for the

District of Columbia, in the exercise of its appellate jurisdiction over the Patent Office in interference cases, in order to avoid unnecessary delay in the institution of interferences between *applicants* and patentees, evolved a doctrine or rule to the effect that, under *ordinary circumstances*, an *applicant* who seeks to interfere with an issued patent must copy the claims of the issued patent within *one year* from its date or be regarded as estopped from doing so.

The Supreme Court in *Chapman v. Wintroath* found this rule or doctrine repugnant to the statutes but intimated that the rule would be tenable, solely because not repugnant to the statutes, if it gave the applicant *two years* to copy the claims of the issued patent.

That the corrected rule or doctrine may, within reason, be enforced against *applicants* for patents is not doubted, but we respectfully submit that this particular rule, or any other Patent Office rule, is of no consequence when the validity of an *issued* patent is to be determined. An issued patent represents a solemn contract between the United States on the one hand and the patentee on the other. The conditions of that contract are set forth in the statutes, and no administrative rule or doctrine pertaining to proceedings preliminary to the consummation of that contract is of any consequence after the contract has been approved by the Patent Office and consummated by the issuance of the patent.

Kane's claims 7 and 8, even when before the Patent Office, were entirely outside of the rule or doctrine of *Chapman v. Wintroath*, because these claims are entirely unlike the claims of any issued patent. Their allowance to Kane did not require the declaration of an interference with any issued patent.

But if, for the sake of argument, it were admitted that

the allowance of claims 7 and 8 involved a waiver of this particular rule or doctrine, we would say that the Commissioner had the right to waive the rule; and that the waiver, or even the oversight of such a rule, is of no consequence when the validity of a patent *granted under the statutes* is concerned.

That the rule or doctrine of *Chapman v. Wintroath* is a mere administrative rule which may be waived in the discretion of the Commissioner of Patents is clearly indicated by the very opinion of the Court of Appeals for the District of Columbia in which the rule or doctrine was announced. Thus, in *Wintroath v. Chapman*, 47 App. D. C. 428, the Court of Appeals for the District of Columbia said:

“We, therefore, adhere to the ruling in the Rowntree case, but with this modification, however, the period should be one year unless the applicant *shall satisfy the Commissioner that the delay was unavoidable*. This brings the holding into closer harmony with the statute governing amendments (Revised Stats. Sec. 4894) than is done by the Rowntree case.”

The Commissioner of Patents provides and frequently revises a set of “Rules of Practice” to govern routine matters in the Patent Office. In addition, both the Commissioner and the Court of Appeals for the District of Columbia, in the exercise of their quasi judicial and quasi administrative duties in interference cases, announce and enforce practice doctrines in their decisions. This custom is right because the standard “Rules of Practice” are insufficient to meet constantly changing administrative problems. But these rules or doctrines, whichever they may be designated, do not amend the patent statutes and no waiver or even oversight of such a rule or doctrine can invalidate a patent for a meritorious invention granted in full compliance with the patent statutes.

That the validity of a patent is not subject either to direct or collateral attack upon any ground not recognized by the patent statutes was settled by the Supreme Court in the case of *United States v. American Bell Telephone Co. et al.*, 167 U. S., 224. In speaking of the statutory right secured to an inventor by his patent grant the court said:

"The statute has given this right, and no consideration of public benefit can take it from him. His right exists because Congress has declared that it should. . . . A party seeking a right under the patent statutes may avail himself of all their provisions, and the court may not deny him the benefit of a single one. These are questions not of natural, but of purely statutory, right. . . . No court can disregard any statutory provisions in respect to these matters on the ground that in its judgment they are unwise or prejudicial to the interests of the public. . . . As the law making power has prescribed what the public will give, specified the terms and conditions of the purchase, indicated the time and methods of determining the right of compensation, he on his part has an absolute legal right to avail himself of all the provisions thus made. It is not, of course, doubted that the courts in construing the patent, as well as all other statutes, must have regard to the spirit as well as the letter. That simply requires that courts shall ascertain their true meaning, but when that is ascertained the applicant for a patent is entitled to all benefits which those statutes thus construed give."

Congress in creating our patent system realized that, if unrestrained, infringers would devise all sorts of elaborate and far-fetched defenses in their attempts to defeat the purposes of the patent statutes. As a preventive measure, Congress enacted a statute (Section 4920, page 43, *ante*) which enumerates and defines the special defenses which may be pleaded by a defendant who challenges the validity of a patent. Needless to say,

an infraction of a Patent Office rule or doctrine is *not* one of these defenses.

When a patent is issued, it has gone forever beyond the control of the tribunals concerned in the issuance of patents, and no rule or doctrine established by the Patent Office or the Court of Appeals for the District of Columbia, no matter how reasonable, can be invoked to destroy it, since the patent monopoly was created by statute, and can be destroyed solely upon statutory grounds.

If the rule or doctrine of *Chapman v. Wintroath* ever applied to Kane's claims 7 and 8, and we submit they were never within that rule or doctrine, the rule was conclusively waived when the Commissioner of Patents, in the exercise of his discretion, decided to issue and did issue Kane's patent.

**Kane's Original and Divisional Applications Were Filed,
Prosecuted and Issued As Patents in Full Compliance
With the Letter and Spirit of the Statutes.**

That the unitary magneto ignition equipment which was evolved by Kane in April, 1909, and made available to the public almost immediately thereafter, involved *invention* in its production cannot seriously be denied at this stage of the case. Both of the courts below have held that Kane did make a meritorious invention.

Kane applied for a patent on February 2, 1910 (R. Vol. 2, page 502). This application fully illustrated his invention and complied with the statutory requirements in every respect. The Patent Office Examiner rejected all of his claims on March 26, 1910. Thereafter, the applicant repeatedly submitted claims for the approval of the Patent Office, but up to May 9, 1914 (when all claims were finally rejected), the Examiner persistently refused

to allow a single claim from the many which the applicant had formulated and submitted. The Examiner, furthermore, failed to suggest any claim which the Patent Office would be willing to allow.

On May 12, 1914, the Patent Office inadvertently issued to John L. Milton a patent containing detail claims descriptive of Kane's structure. We say the Milton patent was inadvertently issued because prior to the issuance of Milton's patent, Milton's claims should have been made the subject-matter of an interference between Kane and Milton in conformity with the mandatory requirements of Section 4904 R. S. (page 44, *ante*).

Kane, on October 22, 1914, added the Milton claims to his application and asked for an interference. Following the addition of these claims, the Patent Office, on November 12, 1914 (R. Vol. 2, 551), stated that "if applicant wishes to contest in interference the invention covered by the claims of the patent, he can do so only by filing a divisional application of this case and presenting therein the claims of the patent." The Examiner required division because Kane's claims which had been improperly* finally rejected on May 9, 1914, were directed to the so-called "cut out," a relatively unimportant feature of Kane's device to which he had been driven in his claims because of the negative attitude maintained by the Examiner.

On January 14, 1915, Kane filed the divisional application which the Patent Office had required (R. Vol. 3, 623). In his first action on this divisional application, dated March 24, 1915, the Examiner called Kane's attention to Podlesak patent No. 1,055,076, saying that it "may have

* The rejected claims of the original application were finally allowed, along with two others on appeal to the Commissioner (R. Vol. II, 613). The original application resulted in patent No. 1,204,573 (R. Vol. III, 914).

bearing upon applicant's case." In investigating the Podlesak patent No. 1,055,076 Kane discovered that it had been reissued as No. 13,878 on February 19, 1915, and that the patent as reissued contained claims which appeared to be descriptive of Kane's disclosure.

Kane promptly on April 17, 1915, added the Podlesak claims to his application for the purpose of an interference (R. Vol. 3, 634). The Patent Office for a time took the position that the Podlesak claims were too narrow to read upon Kane's disclosure, but finally declared an interference between Kane and Podlesak on October 20, 1915 (R. Vol. 3, 679). An interference had previously been declared between Kane and Milton on August 17, 1915 (R. Vol. 3, 643).

Kane's divisional application remained in interference and was not subject to amendment until after May 6, 1918, when the Court of Appeals for the District of Columbia finally held that the Podlesak claims could not properly be included in Kane's application (R. Vol. 3, 700). The Court of Appeals based its ruling upon the doctrine of *Rowntree v. Sloan* and *Wintroath v. Chapman* (which the Supreme Court found repugnant to the statutes in *Chapman v. Wintroath*), and upon the *better ground* that Podlesak's claims were too specific, too narrow, to read upon Kane's fundamental invention on which the Podlesak device was admittedly a mere improvement. The interference with Milton had terminated favorably to Kane before the termination of the interference with Podlesak.

As soon as Kane's divisional application was restored to the jurisdiction of the Primary Examiner, following the termination of the interferences, Kane promptly on June 15, 1918, submitted two additional claims (claims 7 and 8 of the patent in suit) which were not characterized by the limitations of the Podlesak claims, but which,

to the contrary, defined Kane's fundamental invention in a more accurate way than it ever had been claimed before. The Patent Office Examiner (as subsequently did both of the courts below in this case) held these claims to be directed to a meritorious invention and indicated their allowability (R. Vol. 3, 694).

Kane thereupon immediately placed his application in condition for allowance by cancelling the claims of the Podlesak interference, which it had been held were not descriptive of his device. The patent issued on September 24, 1918, and suit thereunder was immediately instituted against the present defendant and others.

If your Honors will read the histories of Kane's original and divisional applications, you will see that at all times from the filing of his original application in 1910 to the submission of claims 7 and 8 in 1918, he was engaged in a continuous struggle to secure the patent protection to which he was entitled under the statute. He complied strictly with the provisions of Section 4894 R. S. (page 45, *ante*) pertaining to the prosecution of applications.

It is true that Kane's real invention (described by claims 7 and 8) was a difficult thing to recite in the claiming clauses of a patent specification. It was not until after the invention had been scrutinized, weighed and analyzed by the courts and Patent Office tribunals in several suits and interferences that the *real invention* and the proper language for defining it were determined. Even the distinguished Circuit Court of Appeals admits that in its first opinion it fell into error through its failure to perceive the real invention. Furthermore, Milton, whose patent disclosure is practically identical with that of Kane, *tried* to secure a patent on Kane's invention, but all he got was a detail patent because *he* did not know how to claim the *real invention*. Kane is

to be commended, rather than criticized, because his patent did not issue until his real invention was defined by the claims thereof. Otherwise the object of the patent statutes would have been defeated.

We respectfully submit that the history of Kane's application in the Patent Office is above reproach, and that the patentee cannot lawfully or rightly be penalized because he could not secure the allowance of a satisfactory claim until his patent applications had been pending for nine years. Nine years is not by any means an unusual length of time for an invention to be held up in the Patent Office, particularly when interferences hold up the issuance of the patent.

Railway Company v. Sayles.

In their reply to the petition for certiorari counsel for the respondent endeavored to create the impression that the decision of the Court of Appeals herein was influenced by the opinion by Mr. Justice Bradley in *Railway Company v. Sayles*, 97 U. S., 554. The Court of Appeals did not mention *Railway Company v. Sayles* in its opinion. Nor do we think the court was influenced thereby because that authority is in no way pertinent to the case at bar.

In *Railway Company v. Sayles*, the patentees, Bachelder & Thompson, applied in 1847 for a patent on a most complicated and impractical car brake which they never placed upon the market. Their application was rejected in 1847. *Thereafter, no proceedings were had in the application for five years.* In 1852, Bachelder & Thompson filed a new application illustrating an entirely different and practical mechanism. They represented that the *invention* of the later application, showing the practical device, was described in the five years abandoned application illustrating the impractical device, and on that

premise secured claims dominating the work of more praiseworthy inventors who had developed and placed their devices upon the market while the first application of Bachelder & Thompson stood abandoned.

Justice Bradley held that the Bachelder & Thompson patent was not infringed but supplemented his decision by an observation including the following statement:

“The law does not permit such enlargements of an original specification which would interfere with the other inventors who have entered the field in the meantime. . . .”

It thus appears that *Railway Company v. Sayles* has no application to the present case. Kane's original and divisional applications always disclosed the same device—the meritorious device which went on the market in 1909, which saved the Webster Company and which revolutionized ignition for single cylinder engines. Kane's applications were co-pending and neither of them was ever abandoned. In fact, each of them was vigorously prosecuted at all times during its pendency in the Patent Office.

Kane, by his claims 7 and 8, merely secured a monopoly on that meritorious invention which he made available to the public in 1909 and which he fully illustrated in his original application filed February 2, 1910.

The Contracts.

Emil Podlesak was in the employ of plaintiff, Webster Electric Company, from August, 1909, until May, 1915, serving successively as engineer, superintendent, works manager, and secretary, and as a director (R. Vol. 1, 140). With him was closely associated his brother, Henry J. Podlesak, and both separately and jointly the two brothers made and patented various inventions relating

to magneto ignition, and owned equal shares in all of their patents. *The Podlesak inventions made subsequent to 1909 were all in the nature of detailed improvements on Kane's fundamental invention of April, 1909.*

In the period between 1908 and 1914, the Webster Company had been licensed under certain *inductor magneto* inventions of the Podlesaks (contract of Nov. 2, '08, R. Vol. 1, 39). When Kane produced his unitary equipment, these strictly *magneto* inventions of the Podlesaks were incorporated therein because the Webster Company has always regarded the inductor type magneto embodying these inventions to be the best (though not, of course, the only) magneto which can be included in Kane's unitary equipment. Up to 1914, the Webster Company was content, so far as the *Podlesak improvements on the Kane invention* were concerned, to work under the unwritten "shop rights" which the relations of the parties created.

But by the early part of 1914 the Webster Company began to enjoy success and to foresee great success and knew that its success was or would be coveted by the Sumter Company and other competitors. No patent had issued to cover the fundamental invention of 1909,* so the Webster Company did the only rational thing under the circumstances; it had its unwritten "shop rights" reduced to writing and had them coupled with the right to prevent competitors from appropriating those *Podlesak improvements on the Kane invention* which were covered by issued patents or were about to be covered by issued patents.

On February 5, 1914, the contract of 1908 was cancelled and two new contracts were made, these new contracts being Exhibits C and D to the bill of complaint herein

* Neither the Kane patent nor the Milton patent had issued in February, 1914.

(R. Vol. 1, pages 48 and 52). These contracts simplified the computation of royalties which had been a difficult matter under the 1908 contract, but obviously the *paramount purpose of the substitution of contract D for the unwritten "shop rights" was to enable the Webster Company to protect itself against piracy of the Podlesak improvements* under which the Webster Company had theretofore enjoyed nothing but unwritten "shop rights."

Exhibit C (substituted for the contract of 1908) left the Webster Company with an exclusive license under these patents which related to the preferred or "tripolar" type of inductor *magneto*, that is to the details of the magneto generator itself. Under that exclusive license complete provision was made for the Webster Company to maintain suits for infringement of the patents, and the Podlesaks were to be paid certain royalties. The final paragraph of this agreement provided that it shall "extend to and be binding upon the heirs, assigns and legal representatives of the parties of the first part" (who were the Podlesaks) and "the successors and assigns of the party of the second part" (which was the Webster Electric Company).

There is no question about the fact that the Podlesaks could not authorize anyone to make, use or sell the devices covered by the patents in Exhibit C, and that their assignment of the contract would carry nothing more than the naked legal title to the patents, and the right to receive royalties from the Webster Company, and the right of reversion upon default by the Webster Company.

The contract Exhibit D (which replaced the unwritten "shop rights") relates to six other patents or applications of the Podlesaks,* among which are the two

* Four of these, including No. 1,101,956 and reissue No. 13,878, cover the refinements of the Kane invention which Emil Podlesak had applied to the Webster Company's commercial device.

patents in suit which have been actually infringed, No. 1,101,956 and reissue No. 13,878. All of the patents included in Exhibit D relate to ignition equipments adapted to include the inductor magneto which plaintiff was granted the exclusive right to make and sell by Exhibit C. Exhibit D provided that the devices included within it were to be made and sold in connection with the devices manufactured under Exhibit C, but it provided for the payment of additional royalties if the Webster Company sold those devices covered by Exhibit D separately from those covered by Exhibit C, in which case it was to pay a royalty of 5 per cent. of all money received.

Contract E (R. Vol. 1, 57) subsequently provided a simpler basis for computing royalties under both contracts C and D but had no other purpose or effect.

All of the Podlesak patents and the contracts C, D and E were assigned from the Podlesaks to the Splitdorf and Sumter Electrical Companies jointly by contract Exhibit F (R. Vol. 1, 60) on September 4, 1915, when the Splitdorf and Sumter Companies had, for some time, been carrying on their admittedly infringing operations. It is solely upon their purchase of the contract D that the Splitdorf and Sumter Companies base their defense against the Podlesak patents.

Judge Sanborn's conclusion was (R. Vol. 1, 802):

"To attempt to authorize a formidable competitor like the Splitdorf Company, one of the very dealers to whom plaintiff was given the right of license, after the latter had built up an enormous business, to profit by that business, is utterly foreign to the spirit and purpose of the contract. The assignment should be restricted to the legal title and right to royalties, accounts and inspection, and the power of the plaintiff to sue for infringement without joining the assignee be recognized."

Plaintiff has always admitted that the assignment from the Podlesaks to the Splitdorf and Sumter Companies, as Judge Sanborn held, transferred the legal title to the patents and the right to receive royalties from the Webster Electric Company. It also transferred the right of termination of the license if the Webster Company should default in royalty payments, in which event the right to operate under the patents and all of the other rights of the Webster Company would revert to the Splitdorf Company and the Sumter Company. That this was a highly profitable purchase is amply evidenced by the fact that the Splitdorf and Sumter Companies paid the Podlesaks only \$65,000 for the assignment of these patents and contracts, while since the assignment those companies have received over \$112,000 in royalties from the Webster Electric Company.

Judge Sanborn Was Correct in Holding that the Transfer of Contract D From the Podlesaks to the Splitdorf and Sumter Companies Could Not Authorize the Latter Companies to Operate Under the Podlesak Patents.

In the granting clause of contract D (R. Vol. 1, 53) the Podlesaks

“do hereby grant unto the party of the second part, (Webster Electric Company) a shop-right and license to manufacture, use and sell the inventions or improvements, and each and every one of them, described, set forth and claimed in said patents, Nos. 1,022,642, 1,055,076,* 1,056,360 and said applications, Serial Nos. 734,143,† 668,153 and 639,738, and any division or divisions thereof, within and through-

* This patent was reissued as No. 13,878, here in suit.

† This application became patent No. 1,101,956, here in suit.

out the United States of America and Territories and Possessions thereof, for and during the term of said patents or any of them; and the parties of the first part (the Podlesaks) agree that they have good right and lawful authority to grant said shop-right and license, and that they have not heretofore parted with any right, license or privilege inconsistent therewith and that they will not, while this shop license to the party of the second part is in force, **give or grant** shop licenses to **others** to make, use or sell herein said inventions, expressly reserving, however, the right to **themselves** to make, use and sell the herein said inventions."

It seems to us and it seemed to Judge Sanborn perfectly clear that this granting clause, after licensing the Webster Electric Company, effectively provided that while the Podlesaks "themselves" should also have the right to make, use and sell the patented devices, they could not authorize "others" to do so.

If contract D had been a simple license from the Podlesaks to the Webster Electric Company there would have remained in the Podlesaks the right to operate under the patents and to authorize others to do so. That, however, was not the desire of the parties, and the quoted language of the granting clause is entirely incapable of being cast aside as surplusage, as our adversaries would like to treat it. It is obvious that the Webster Electric Company did not object to what it considered would be the insignificant activities of the Podlesaks themselves, but that it did desire clearly to preclude the possibility of substantial competition by others. The granting clause, therefore, was made to state very clearly and expressly that the right to operate under the patents was limited to the Podlesaks "themselves" and could not be extended to "others."

Our opponents argue that plaintiff will not be injured

by the interpretation of the contract for which they contend. They say that plaintiff was willing to have any other one concern beside itself operate under these patents, and that their interpretation of the contract merely substitutes the competition of one of the defendants, the Splitdorf Electrical Company, for the activities of the Podlesaks. That is far from the fact. Plaintiff never was and never has been willing that any one other than itself should have a right to operate under these patents, except the Podlesaks "themselves"; and the contract expressly so provides.

The Podlesaks have never, in any way whatever, exercised this right reserved to "themselves" to utilize these inventions. They have been content, *as anticipated by the Webster Company*, to receive their royalties from the Webster Electric Company which up to the time of trial aggregated over \$95,000 (R. Vol. 1. 474). On the other hand, the transfer from the Podlesaks to the defendants purported to authorize not only the Splitdorf Electrical Company but also the Sumter Electrical Company to operate under the Podlesak patents; it attempted, entirely contrary to defendants' present argument, to substitute two large, resourceful and going corporations for the inactive Podlesaks "themselves." Furthermore, as the infringing activities of the defendants increased, a third corporation, The Sumter Electrical Company of Illinois, was authorized by them to operate under these patents, and it, in turn, had various parts of the infringing devices made by different factories in Chicago and then authorized engine manufacturers to assemble the parts to form the infringing apparatus (R. Vol. 1, 416-425).

It is entirely apparent, therefore, that the defendants have attempted to create the very situation, which the language of the granting clause of contract D expressly

prohibited. The Webster Electric Company was willing that the Podlesaks "themselves" should operate under these patents because it had known the Podlesaks for years and knew them to be individuals without an organization or resources enabling them seriously to compete with the Webster Electric Company. The Webster Company was entirely unwilling to have either one or any "others," like its most formidable competitors, the Splittdorf Electrical Company and the Sumter Electrical Company, substituted for the Podlesaks and authorized to operate under the Podlesak patents, and thus destroy every shred of value which the Webster Company obtained under its contract. And the granting clause expressly so provided.

Defendants' Contention Violates Not Only the Express Language, But Also the Whole Intent of Contract D.

The whole intent of the Podlesaks and the Webster Electric Company as expressed in the other provisions of contract D demonstrates that the exact language of the granting clause was intended to prevent precisely the situation which defendants are seeking to create.

The granting clause of contract D gave to the Webster Electric Company the "license to manufacture, use and sell the inventions or improvements, and each and every one of them, described, set forth and claimed" in the included patents. The second paragraph (R. Vol. 1, 53) provided that any suits for infringement of these patents should be brought by Webster Electric Company entirely at its own expense, and the Podlesaks

"hereby appoint the attorney for the party of the second part as their agent and attorney for the purpose of joining them as parties complainant where necessary or desirable, in any suit which the party of the second part may wish to bring on account of

the infringement of any of said letters patent or any patent which may be granted upon their aforesaid applications, the said attorney for the party of the second part to have the power to execute as the attorney and agent of the parties of the first part any papers which may be necessary or convenient to the commencement and maintenance of any such suit."

Paragraphs 8 and 9 of Contract D (R. Vol. 1, 56) provided that the Webster Electric Company, with the approval of the Podlesaks, shall have the right to grant licenses "to makers of or dealers in gas engines and gas engine accessories."

In the granting clause the Podlesaks agree "that they will not, while this shop license to the party of the second part is in force, *give or grant* shop licenses to others to make, use or sell the hereinsaid inventions."

It is obvious from these provisions that the Webster Electric Company was given the right to make, use and sell under the patents included in contract D; that the Webster Electric Company was given the entire control of suits against infringers; that the Webster Electric Company was given the power, with the approval of the Podlesaks, to grant licenses "to makers of and dealers in gas engines and gas engine accessories," such as the Splitdorf and Sumter Companies; and that the Podlesaks agreed not to grant licenses under any of these patents to others than the Webster Electric Company.

It is clearly apparent, therefore, that these provisions of this contract gave to the Webster Electric Company not only the right to make, use and sell these inventions, but the right entirely to control the use of these inventions by others, either by suing them for infringement, or, if they were makers of gas engines or gas engine accessories, by licensing them if it was desirable.

Clearly no right under any of the Podlesak patents existed anywhere outside of the Webster Electric Com-

pany except that right reserved to the Podlesaks "themselves" to operate under the patents. That right was made personal to the Podlesaks by the express language of the granting clause which reserved this right to the Podlesaks "themselves" and at the same time provided that they would not authorize "others" to make, use or sell the inventions.

The Power of Exclusion Under the Podlesak Patents Is in Plaintiff.

Defendants in the Court of Appeals, based much of their argument on the assertion that Judge Sanborn was mistaken in holding that the Podlesaks "retained no power of exclusion whatever; that was in the plaintiff." They seek to substantiate this assertion by saying that plaintiff itself has admitted, by bringing infringement suits in the names of the Podlesaks, that the Podlesaks did retain the power of exclusion under these patents.

Judge Sanborn's holding was correct and defendants' argument is faulty. Contract D put into the Webster Electric Company the whole power of controlling operations under the Podlesak patents except by the Podlesaks "themselves." The contract provided (R. Vol. 1, 54) that suits for infringement should be brought entirely at the expense of Webster Electric Company and the Podlesaks gave the Webster Electric Company a clearly irrevocable power of attorney to take any action in their names which the Webster Company might think necessary or desirable in any suit which the Webster Company might wish to institute. The legal title to the patents remained in the Podlesaks so that they were proper and necessary parties to a suit for infringement. The absolute power to institute and control suits, however, was granted by the Podlesaks to the Webster Electric Com-

pany. Their names might be used as a formal matter but the entire control of the use of their names and the institution and management of infringement suits was granted to Webster Electric Company. Clearly the Podlesaks "retain no power of exclusion whatever; that was in the plaintiff."

In the summer of 1915, when the Sumter Electrical Company's infringement of these patents commenced, a bill of complaint sworn to by Emil Podlesak himself was immediately filed on August 21st, 1915 (R. Vol. II, 31). It was only fifteen days later that the Podlesaks sold their patents, their contracts and themselves to the Splitdorf Electrical Company and the Sumter Electrical Company. If defendants' present contention is sound, that South Carolina suit might have progressed through the trial court and through the Court of Appeals and through a subsequent accounting and at any time, up to the very minute of entering the final decree, the Podlesaks could have rendered the whole litigation futile by the simple expedient of transferring their contracts as they have done to the defendants. The possibility of such a result does violence to common sense and is repugnant to the express provisions of contract D.

Defendants' Argument That the Podlesaks Could "Assign" What They Could Not "Give or Grant" Is a Mere Play Upon Words.

We have then, in contract D, the grant to Webster Electric Company of a license under the Podlesak patents, and of the absolute right to control litigation for infringement of those patents, and of the right to license such manufacturers as these defendants, with the endorsement of the Podlesaks; and we have a reservation to the Podlesaks "themselves" of the right to operate

under these patents, coupled with their express covenant that they will not give or grant licenses to "others."

What is the function, purpose and effect of such an agreement? Does it not plainly and unequivocally mean to any one that the owners of the patents were not only granting a license to the Webster Electric Company but were agreeing that no other person except themselves should, during the life of the grant, obtain from the grantor under any circumstances the right to make, use or sell the patented devices? Would it not take language of the clearest and most unambiguous character to contradict this manifest intention and to lead to the conclusion that the grantors can do indirectly what they covenanted not to do directly?

Yet this is exactly the position of opposing counsel. They say that the Podlesaks, although they agreed to grant no licenses to others, did not at all mean that they could not create in others the right to make, use and sell. Others could be given the right to make, use and sell, if only the scrivener of the instrument, by which such right was created, was careful not to use the word "license." That is to say, it was not the substance but merely the form about which the parties were contracting. The Webster Electric Company, so defendants argue, did not care whether formidable competitors should be put on a parity with it or be given a preference over it, so long as the instrument for the purpose was called anything other than a "license." Could this *word* be avoided, they say, the Webster Electric Company would be completely satisfied.

Time was, in the infancy of our legal system, when arguments of this character frequently prevailed and when life and property turned upon *words* employed and no effect was given to *intent*. But legal progress has advanced beyond those dark ages and now the meanings

of language is heeded by the courts far more than the form.

It is obvious that in entering into contract D the parties intended that the Podlesaks should give the Webster Electric Company the right to make, use and sell, and that no one else should ever obtain from the Podlesaks, the right to make, use and sell.

The Assignment Clause Cannot Completely Nullify the Contract, as Defendants Contend.

But, so defendants argue, the express language of the granting clause and the whole intent of the parties as expressed through out the contract was rendered nugatory by the provision at the end of the instrument that "this agreement shall extend to and be binding upon the heirs, assigns and legal representatives of the parties of the first part, and the successors and assigns of the party of the second part." In other words, defendants argue that, although the Podlesaks expressly agreed not to license others to operate under these patents, they nevertheless may accomplish precisely the same object by assigning the right which the Podlesaks reserved to "themselves." Now an assignment can be made jointly or trebly or to an indefinite number of persons, and although defendants' counsel argue that the formidable Splitdorf Company has merely been substituted for the inactive Podlesaks, that argument is not true. The transfer from the Podlesaks was made to the Splitdorf Company and Sumter Company jointly, and they, in turn, have attempted to authorize still other concerns to use these patents under their protection. By the simple expedient of calling the instrument an *assignment* they attempt to do precisely the thing which they admit the Podlesaks covenanted not to do.

We submit that the expressed intention of the parties to a contract cannot be so severely mutilated through the instrumentality of visionless literalism. Persons of sound mind could not have intended that the Podlesaks were free to create by way of assignment what they were so clearly precluded from creating by way of license. The reserved right of the Podlesaks was a purely personal right by its very nature, and by the expressed intention of the parties that the right to do those things which the Webster Electric Company was authorized to do and which the Podlesaks reserved to "themselves" should not be granted to "others." This plain intention cannot be held to have been nullified unless the language of the contract necessarily compels such an interpretation of the assignment clause. If this last clause would be meaningless without such construction—that is, if not so construing it would be the equivalent of omitting it—then there would be something to the position of opposing counsel, but as Judge Sanborn pointed out, the assignment clause in contract D is found in exactly the same language in contract C, executed on the same day. It is agreed that the effect of the clause in the exclusive license Exhibit C was the permission to the Podlesaks to transfer the legal title to the patents, and the right to receive royalties, and the right of reversion of the Webster Company's rights if the latter should default. It is obvious that this was also its only function in Exhibit D. It was not intended to authorize the Podlesaks to transfer the right clearly reserved to "themselves" personally and thus render meaningless all other provisions of the contract.

There are other provisions of contract D equally personal to the Podlesaks and equally nonassignable. The second paragraph of the contract (R. Vol. 1, 53) provides that the Podlesaks will assist each other in the prosecu-

tion of patent applications, and in interference proceedings, and in any suit for infringement of any of the patents included in the contract. The Podlesaks know every detail of the conception and completion of their own inventions, and no one else could possibly disclose the facts and give the testimony known only to the Podlesaks personally. The applications have matured into patents, and interferences with the issued patents are unlikely, but it still may be vital to plaintiff to have the personal co-operation of the two Podlesaks in infringement suits, if it should become necessary to establish that these inventions were made by the Podlesaks earlier than by an asserted rival. Obviously no one but the Podlesaks themselves could fulfill this obligation of the contract.

Again, the eighth paragraph provides that the Webster Company, with the approval of the Podlesaks, shall have the right to license manufacturers of gas engines and gas engine accessories to make devices under the patents of contract D, but to be used only in connection with the magneto generators which plaintiff was exclusively licensed to make by contract C. Assume that an engine manufacturer desires to buy only the magneto generator and to manufacture his own plug-bracket and actuating mechanism of the Podlesak patents in suit. The Webster Company might well license him under the patents of contract D, provided he agreed to buy the magneto generator itself from the Webster Company. Under these circumstances the Podlesaks would have a real incentive to approve such a license to the engine manufacturer, for they would have everything to gain and nothing to lose by so doing. By approving such a license the Podlesaks would promote the sales of Webster magneto generators on which they would be paid large royalties under contract C. If they did not approve the license the engine manufacturer would probably refuse to buy either the complete

equipment or the magneto alone from the Webster Company and thus the Podlesaks would lose the royalties on the magneto generators which he otherwise would have purchased.

The Splitdorf Company and the Sumter Company, on the other hand, have no incentive to approve such a license. Instead of having an incentive to approve such a license, the Splitdorf Company and the Sumter Company would certainly refuse their assent. The Podlesaks have never been engaged in the manufacture of magneto generators, but the Splitdorf Company and the Sumter Company manufacture and sell large quantities of magneto generators in competition with Webster Electric Company, and were engaged in this business even prior to the commencement of the Webster Company's business. If the Webster Company were to negotiate such a license to an engine manufacturer and submit it to the Splitdorf and Sumter Companies for their approval, what would those companies naturally do? They certainly would not approve the license, despite the fact that they would receive a royalty on the magnetos sold by the Webster Company, because the license would prevent them from making the greater profit which they would realize if they were free to sell their own magnetos to the engine manufacturer. Undoubtedly the Splitdorf and Sumter Companies would immediately send to the engine manufacturer a salesman who would point out that if he bought the Webster equipment he would have to pay a price high enough to include the royalty payable by that company. On the other hand, the salesman would offer him the defendants' magneto, on which no royalty would be payable, at a price so low that the engine manufacturer could not afford to purchase his equipment of the Webster Company. In every instance, therefore, the Splitdorf and Sumter Com-

panies would certainly refuse to approve licenses submitted by the Webster Company, and would take advantage of the submission of such licenses to defeat sales by the Webster Company and effectuate sales of their own magnetos.

The reserved right to the Podlesaks "themselves" to utilize these inventions, and all of the other features of this contract except the legal title to the patents and the right to receive money as royalties and the right of reversion, are so clearly and certainly personal to the Podlesaks that their nonassignability is not in the least altered by the repetition in this contract of the assignability clause of the companion contract.

If the Podlesaks, by assigning this contract, can authorize the Splitdorf and Sumter Companies to utilize these inventions, what becomes of the provision that they will not grant licenses to others than the Webster Electric Company? What becomes of the provision that the Webster Electric Company may institute and control suits against infringers? What becomes of the provision that the Podlesaks appoint the attorneys of the Webster Company their attorneys to join them in suits for infringement, and to execute and file any necessary or desirable papers in their name—a clearly irrevocable power coupled with an interest, but which the Splitdorf and Sumter Companies have presumed to revoke? What becomes of the provision that the Webster Company shall initiate and with the approval of the Podlesaks may effectuate licenses to makers of gas engines and gas engine accessories—the very class of which the Splitdorf and Sumter Companies are members?

The attempted assignment of the right to utilize these inventions, from the Podlesaks to the Splitdorf and Sumter Companies, is so palpably a fraud upon the contractual rights of the Webster Electric Company, and

is so obviously repugnant to the intention of the parties as expressed in the contract, that defendants' contention that this attempted assignment was valid for that purpose is without any justification.

An entirely analogous situation was before the courts in *Central Brass & Stamping Co. v. Stuber*, 220 Fed., 909. In that case the patent in suit was issued to Nelson and Stuber, who made a contract that Stuber should be the exclusive manufacturer, and Nelson the exclusive seller, with the provision that if Stuber failed to manufacture in desired quantities, Nelson should acquire the exclusive right to manufacture. It was further provided that the parties, "their heirs or assigns" should not make any arrangement enabling others to manufacture the patented devices. Nelson assigned his interest in the patent and all of his rights under the contract to plaintiff.

Aside from the defense that he was a half owner of the patent and could not be sued, Stuber also maintained that the contract was personal to Nelson, and that his assignment of it could not convey his rights to plaintiff. The court sustained this defense, saying:

"Nelson being the patentee and thoroughly advised as to the merits of the patented device, and also being so solicitous of its success as to take advantage of the provision of the contract in that respect, might well have been considered by the appellees as best equipped to push the device upon the market and make the investment remunerative. They were entitled to his personal efforts in that behalf. As is said in *Arkansas Smelting Company v. Belden Mining Company*, 127 U. S., 387, 8 Sup. Ct., 1309, 32 L. Ed., 246:

'Every one has a right to select and determine with whom he will contract, and cannot have another person thrust upon him without his consent.'

"And again:

"The rule upon this subject, as applicable to the case at bar, is well expressed in a recent English treatise. "Rights arising out of contract cannot be transferred if they are coupled with liabilities, or if they involve a relation of personal confidence such that the party whose agreement conferred those rights must have intended them to be exercised only by him in whom he actually confided." Pollock on Contracts (4th Ed.) 425."

"(3) It will be noted that the contract gives the right to manufacture, and to sell. It nowhere conveys exclusive use. Nor can the right to exclusive use be implied from the facts of the case. **It does use the terms 'assigns' and 'heirs,' but, as was said by the court in *Wooster v. Crane, etc.*, 73 N. J. Eq. 22, 66 Atl. 1093, the contract was not made assignable by the use of those terms as to its unexecuted subject-matter, if in fact it was a personal contract.** If it be contended that the contract worked a sale of the whole patent, or of appellees' interest therein, it is sufficient answer to say that failure to convey exclusive use, and the provisions of the contract, and especially that of clause 7 thereof dealing particularly with regard to Nelson's duties to appellee in the premises, clearly bring it within the rule as to non-assignability of a personal contract; and we therefore concur in the decision of the District Court that appellant took no rights through the assignment. *Waterman v. Mackenzie*, 138 U. S. 233, 11 Sup. Ct. 334, 34 L. Ed. 923; *Excelsior Wooden Pipe Co. v. Seattle*, 117 Fed. 140, 55 C. C. A. 156; *Pope Mfg. Co. v. Gormully Mfg. Co.*, 144 U. S. 224-251, 12 Sup. Ct. 632, 637, 641, 36 L. Ed. 414, 419, 420, 423."

The same conclusion, entirely contrary to defendants' contention here, was reached in the following cases:

Swarts v. Narragansett Electric Lighting Co., 28

R. I., 436, 59 Atl., 111;

Montgomery v. DePicot, 153 Cal., 509, 96 Pac., 305;

Wooster v. Crane & Co., 66 Atl., 1093.

In the Swarts case the court said:

“We did not, and do not now, consider that the use of the word ‘assigns’ was significant of the intention of the parties or the construction of the contract. The words may have force without reference to the construction as between the original parties. Money earned under a contract for personal service, or an *executed* contract, can be assigned, and the amount due recovered under the promise of the agreement; **but that is a very different matter from an assignment of an executory contract as a whole.** The mere use of a word descriptive of a person who may take an interest in the contract under certain circumstances does not control the construction of the contract itself. *For example, if the words ‘executors and administrators’ were in a contract to paint a picture, it would not be contended that the executor of the artist could paint it. With equal reason the mere use of the word ‘assigns’ does not make a contract assignable, when the contract calls for personal service.*”

The court, in the Montgomery case, held:

“Whether a given contract is assignable or not is a question of construction. Now, as to the contract at bar. The reading of it discloses that by its terms it was assignable. It provides for a conveyance by defendants of the property to ‘said party of the second part (Bradshaw), his heirs, executors and assigns,’ upon the fulfillment of certain conditions by Bradshaw or his ‘heirs, executors or assigns.’ These, however, are general provisions of the contract and are not conclusive upon the subject of assignability. The use of such language in a contract is not in every case absolutely determinative of its character. (*Swarts v. Electric Light Co.*, 26 R. I., 436, 59 Atl. 111.) **Notwithstanding its use the intention of the parties must be gathered from a consideration of the terms and entire tenor of the contract** and if upon such consideration it appears that the contract calls for the performance of an obligation purely personal in its nature, the rule in general is that the obligation, if personal, cannot be assigned without the

consent of the party to be benefited. (*Bethlehem v. Annis*, 40 N. H. 34; 77 Am. Dec. 700; *Ice Co. v. Potter*, 123 Mass. 28; 25 Am. Rep., 9; *Arkansas, etc. Co. v. Belden Mining Co.*, 127 U. S., 379; 8 Sup. Ct., 1308.)”

In *Wooster v. Crane*, the opinion was delivered by Judge Pitney (Mr. Justice Pitney of the Supreme Court), in the course of which he said:

“It seems to me that these principles, thus illustrated by adjudged cases, are conclusive in favor of complainant, and I must advise a decree rescinding the contract, unless another point made by the defendant has some substance, viz., that the contracts in question by their terms are made assignable. One contract, dated the 19th day of February, 1900, is expressed to be between Lizzie E. Wooster and Crane & Co., and their successors and assigns, a corporation, Shawnee County, State of Kansas. Then, after recitals in this clause, ‘therefore this agreement witnesseth that the said Lizzie E. Wooster, having full power to make this grant, hereby agrees that the said Crane & Co. have the exclusive right to publish and print the said books or any revised edition thereof during the full term of copyright thereof and during the full term or terms of any renewals of said copyright.’ Then Miss Wooster agrees to defend the copyright and to bear the cost of illustration and metal plates, and Crane & Co. have the right to sell editions or duplicate plates in foreign countries; and the contract proceeds: ‘The above agreements are made with the understanding that the said Crane & Co. and their representatives and assigns shall in substantial good faith keep and perform their agreement hereinafter contained.’ Then follows the covenants on the part of Crane & Co. that they will publish the books and pay Miss Wooster 10 per cent. of the cash receipts as royalties, and will render semi-annual statements. The next agreement is that of the 15th of March, 1900, in which the parties are described as in the previous contract, and then after a recital of the books, Miss Wooster agrees that Crane & Co. shall have the exclusive

right to publish and print the said books or any revised edition thereof during the full term of the copyright thereof, and during the full term and terms of any and all renewals of said copyright. Then, like the previously recited agreement, there is a clause that these agreements are made with the understanding that Crane & Co. and their legal representatives and assigns shall keep and perform that agreement. Then comes the contract by Crane & Co. to publish and pay royalties, etc. *Upon careful consideration I am unable to give to the presence of the word 'assigns,' as above quoted, the force the defendant claims for it. I am unable to construe it as a contract on the part of Miss Wooster to deal with anybody to whom Crane & Co. may assign that contract, and to accept such assignee as paymaster. It will be observed that, wherever there is a covenant on the part of Crane & Co. to do anything on its part, the weight of the covenant is placed entirely upon Crane & Co. Upon the whole, I am of the opinion that the only effect of the word 'assigns' is to give the right which Crane & Co. have without that word, viz.: that their assignee would take whatever interest they had in the contract up to the time of the assignment, precisely as in the case of one partner selling out his interest in the partnership. The result is that I think that the complainant is entitled to a decree of rescission."*

Plaintiff submits, therefore, that the right of the Podlesaks "themselves" to make, use and sell the devices covered by the contract Exhibit D was entirely personal to them, and that the assignability clause did not authorize them to transfer that right, but related only to the legal title to the patents, and the right to receive money payments from the Webster Company, and the right of reversion upon default by the Webster Company. Any other interpretation of this contract would render entirely ineffectual every substantial provision in it, and would be directly contrary to the very clearly expressed intention of the parties to that contract.

This interpretation of the contract, which we say and Judge Sanborn has found is necessitated by its clearly expressed provisions, does not do violence to the assignability clause, as defendants would have that clause do to every other provision of the contract. Defendants say that this clause overrides the remainder of the contract and enables them to obtain by the subterfuge of *assignment* what the Podlesaks clearly agreed they would not *grant*. We say, and Judge Sanborn held, that it was never intended by the parties that the rights granted to the Webster Electric Company should be utterly destroyed by this simple expedient but that the assignment clause was intended to permit the conveyance of the impersonal rights under the contract so as to leave the contract as a whole still effective for its purposes. The assignment clause left the Podlesaks free to transfer and the defendants to acquire the legal title to the patents, and the right to receive royalties from the Webster Electric Company under the contract, and the right of reversion if the Webster Company should default. That these rights which we concede the Splitdorf and Sumter Companies acquired are highly valuable, and that their purchase of them was exceedingly profitable is evidenced by the fact that they have received from the Webster Electric Company since September 4, 1915, royalties of over \$112,000 under a contract for which they paid the Podlesaks only \$65,000.

The Essence of Contract D Is the Grant to the Webster Company of the Right to Exclude "Others"; the Exception As to the Podlesaks "Themselves" Must Be Construed in Favor of the Webster Company.

We have hereinbefore pointed out that the Podlesak *improvements* on the Kane equipment (covered by contract D) were designed or invented by Emil Podlesak while an employee and officer of the Webster Company, and were by him applied to the Webster Company's product to further the sale of the inductor magneto on which the Podlesaks were receiving substantial royalties under the license contract of November 2, 1908. Obviously, the Webster Company needed no written license merely to manufacture and sell the improvements which Podlesak, working for the Webster Electric Company, had designed to further the sale of the magneto on which the Podlesaks were receiving royalties under the contract of 1908.

Gill v. U. S., 16 S. C. 322, 160 U. S., 426.

What the Webster Company did not have, and what it needed, was the right to prevent competitors, such as the Sumter Company, from appropriating the Podlesak improvements. The unwritten "shop rights," of course, included no right to exclude competitors.

The only substantial right which the Webster Company secured by contract D, which it did not enjoy by virtue of its unwritten "shop rights," was the right to exclude competitors from appropriating the Podlesak improvements. Therefore, the grant to the Webster Company of the right to exclude competitors must be regarded as of the very essence of contract D.

It appears from the face of contract D that the Podlesaks were willing to grant and did grant to the Webster Company the right to institute infringement

suits against competitors, the Podlesaks agreeing to grant no shop license which might be set up in defense of any such suit. Thus was the right to exclude competitors from appropriating the Podlesak improvements granted to the Webster Company. But the Podlesaks desired to make one exception out of this grant. Out of the grant, they excepted to "themselves" the right to make, use and sell the structures of the Podlesak improvement patents. This exception was inserted for the benefit of the Podlesaks, presumably at the demand of the Podlesaks, and must be construed in favor of the Webster Electric Company.

It is a well settled law that exceptions or reservations inserted in a contract are to be construed against him for whose benefit they are made. (See 13 Corpus Juris, 546; *Wadsworth v. Smith*, 11 Me. 278; Page on Contracts, Vol. 11, page 1744; Leake on Contracts, 6th Ed., page 151; *Richmond v. Brandt*, 118 Ill. App. 624; *Capital City Bank v. Hilson*, 59 Fla. 215; *Burton & Company v. English & Company*, Law Reports, 12 Q. B. D., 218; *Bullen v. Denning*, 5 B and C 842, 108 English Reports 313; *Savill Brothers v. Bethell*, Law Journal Reports 1902, Chancery Division 652.)

Thus, in the Savill case, Lord Stirling said:

"It is a settled rule of construction that where there is a grant and an exception out of it, the exception is to be taken as inserted for the benefit of the grantor and to be construed in favor of the grantee."

When the Court of Appeals construed the exception to "themselves" to mean "the Podlesaks and *their assigns*," it was reversing the time-tried rule of construction pertaining to exceptions. It construed the exception in favor of the *grantor* when precedent, and certainly the equities of this case demand that the exception be construed in favor of the Webster Company, the grantee.

If the parties had ever understood that the right of exclusion granted to the Webster Company by the Podlesaks was to be impotent against anyone but the Podlesaks "themselves," the reservation or exception could and should have so stated. The reservation or exception did not so state, and we submit that fairly (not necessarily strictly) construed it runs, as it says, to the Podlesaks "themselves" and not to *their assigns*.

If the words "and their assigns" had been included in the reservation or exception, the Webster Company would never have subscribed to contract D for the simple reason that the unwritten "shop rights" which the Webster Company had theretofore enjoyed would not have been improved upon at all by such a *written* "shop right agreement."

The Assignment From the Podlesaks to the Sumter and Splitdorf Companies Indicates That the Defendants Knew That the Excepted Right to the Podlesaks "Themselves" Was Not Assignable on the Face of Contract D.

When the Sumter and Splitdorf Companies acquired the rights of the Podlesaks under contract D, they well knew that the right in the Podlesaks "themselves" to manufacture and sell the inventions covered by that contract was *not assignable* under any reasonable interpretation of the contract itself. Therefore, they insisted that the Podlesaks *warrant* that the Webster Company at the time it executed contract D, "understood and agreed" that the right to manufacture and sell (on the face of the contract, personal) were, in fact, assignable.

Thus, in the assignment from the Podlesaks to the Sumter and Splitdorf Companies (R. Vol. 1, 64), we find the following:

"The parties of the first part hereby warrant that they have the right to manufacture, use and sell the inventions described and claimed in letters patent No. 1,022,642, April 9, 1912, No. 1,055,076, March 4, 1913, reissued February 9, 1915 as No. 13,878 and 1,056,360, March 18, 1913, also applications serial No. 734,143, filed November 29, 1912, serial No. 668,153, filed December 27, 1911, and serial No. 639,738, filed July 21, 1911; . . . and that when they made and entered into said agreements with the said Webster Electric Company, it was understood and agreed on the part of the Webster Electric Company that the parties of the first part hereto reserved and retained to and in themselves all the rights, title and interest herein and hereby warranted and that the same were assignable by the parties of the first part at their own will and pleasure."

There is not a word in the record herein to the effect that the Webster Company at any time "understood or agreed" that the right of the Podlesaks "themselves" to manufacture and sell the inventions of contract D was assignable. In fact, the Webster Company has always understood and contended to the contrary.

If the excepted right of the Podlesaks "themselves" had been assignable on the face of contract D, the Sumter and Splitdorf Companies would have had no purpose in insisting that the Podlesaks *warrant* that the Webster Company, at the time contract D was made, "understood and agreed" that the right of the Podlesaks "themselves" to manufacture and sell was assignable. The fact is that the Sumter and Splitdorf Companies knew that the excepted right of the Podlesaks "themselves" was not assignable on the face of contract D, and such being the case they required the Podlesaks to *warrant* a collateral understanding which did not appear upon the face of the contract.

The Podlesaks warranted that which was untrue. The Webster Company never "understood and agreed" that

the excepted right to the Podlesaks "themselves" might be transferred to any such formidable competitor as the Sumter Company or the Splitdorf Company. The Sumter and Splitdorf Companies have infringed two of the patents covered by contract D and should account to the Webster Company for such infringement. If they were in any way misled into continuing* such infringement by the false "warranty" of the Podlesaks, they have their remedy against the Podlesaks.

The contract between the Sumter and Splitdorf Companies and the Podlesaks demonstrates that the defendant corporations were not bona fide purchasers without notice entitled to have the assignability clause of contract D construed in their favor with unconscionable literalism. The defendant corporations fully realized that assignability of the excepted right to the Podlesaks "themselves" was contrary to reason and the apparent intent of the contract; therefore, they required the Podlesaks to warrant a collateral understanding with the Webster Company—a collateral understanding which never existed.

Plaintiff Is Not Estopped to Assert the Kane Patent Against Defendants.

In the Court of Appeals counsel for defendants argued that it is inequitable for plaintiff to assert the Kane patent against defendants, because plaintiff is licensed under the Podlesak patents, the legal title to which has been acquired by defendants; and also because (so it is asserted) plaintiff has contracted with the Podlesaks to aid and assist them in interference proceedings relating to the Podlesak inventions and in any suit under any of the Podlesak patents. It seems to us that in making this

* They infringed before seducing the Podlesaks.

argument defendants are grasping at another and still less buoyant straw. The argument is unsound in law and has no basis in fact, for plaintiff never contracted to do anything of the sort.

In the first place, the argument is entirely irrelevant unless it properly could be held that the defendant companies have acquired the personal right of the Podlesaks "themselves" to operate under the patents. We have demonstrated earlier that such a conclusion is entirely unjustified. But even if that conclusion be assumed for the purpose of testing defendants' argument, that argument is unsound.

The Webster Electric Company was not the owner of the Podlesak patents and of course did not pretend to grant a license under them. The situation was precisely the reverse. The Podlesaks owned the patents and granted the Webster Electric Company a license which neither expressly nor by implication nor by any possible reason put upon the Webster Electric Company the burden of warranty to the Podlesaks of any right or title to do anything. The Webster Electric Company did not grant the Podlesaks any right, but merely received from the Podlesaks the right to make, use and sell under the Podlesak patents and the other protective rights stated in contract D. The reservation to the Podlesaks themselves of the right to make, use and sell under the patents which they owned is not a grant, but a limitation. It is in no way equivalent to the ownership of the patents by the Webster Electric Company and the grant of a license by it with a warranty of its title and right to grant that license. In the latter case the Webster Electric Company would have been granting immunity which it held itself out as entitled to grant, while the actual fact is that it received and is paying for immunity which the

Podlesaks and their assignees have warranted they had the right to grant.

In this connection defendants argue that plaintiff, by asserting the Kane patent, is denying the validity of the Podlesak reissue patent and is attempting to destroy the claims of that patent under which it is licensed. On the contrary, plaintiff is asserting the validity of the claims of the Podlesak patent and is continually paying very large royalties for its own immunity from suit under those claims.

It is, of course, true that the Webster Company, being a licensee under the Podlesak reissue patent, is impliedly (as well as expressly) estopped to deny the validity of that patent because it cannot act under its licensor's title and at the same time deny that title. The Webster Electric Company never has questioned nor is it now questioning the validity or scope of the Podlesak claims. It has continually been paying a royalty for the right to use the improvements upon the Kane invention which are covered by the Podlesak patent.

The Podlesak patent gave to Podlesak and his assignee merely the negative right to exclude others from making, using or selling the improvements or modifications covered by the claims of his patent. The patent gave him no positive right to make, use and sell anything. If the Kane patent had been issued to Kane personally the Podlesak patent would have prevented him from making, using or selling the Podlesak improvements; but, on the other hand, the Podlesak patent would have given no one any right to use those improvements in such a way as to infringe the Kane patent for the underlying invention on which those improvements were based. In taking a license under the Podlesak patent the Webster Electric Company merely purchased immunity from suit by the

Podlesaks for making, using or selling the Podlesak improvements, and the fact that the Kane patent was issued not to Kane personally, but to the Webster Electric Company, does not in any way alter the situation between the Podlesaks and the Webster Electric Company. The Webster Company still enjoys this immunity under the Podlesak patent, and is continually paying for that immunity and recognizing the right of the Podlesaks to grant it. At the same time, however, it has obtained the right by virtue of the Kane patent to say to everyone, including the Podlesaks and their assignees, that they shall not use the Podlesak improvements in such a way as also to use the fundamental invention on which those improvements are based. It is the cordially recognized duty of the Webster Electric Company not to dispute the validity of the Podlesak claims, but the simultaneous assertion of the Kane patent does not in the least question the validity of those claims, nor deny to the Podlesaks or their assignees the right to exclude every unauthorized person from making, using or selling the Podlesak improvements, except as limited by contract.

Precisely this situation was involved in the case of *Victor Talking Machine Co. v. American Graphophone Co.*, 189 Fed., 359 (C. C., S. D. N. Y.), which was affirmed without opinion by the Second Circuit Court of Appeals at 190 Fed., 1023. Plaintiff in that case brought suit for infringement of the Johnson patent against defendant's acts under the Jones patent. Plaintiff was licensed under the Jones patent. The court found that Johnson was the prior inventor and that the Johnson patent was infringed by the Jones process, but that sustaining the Johnson patent did not invalidate the Jones patent. Defendant contended, as defendants contend here, that because of the license to plaintiff under the Jones patent defendant

had an implied license under the Johnson patent. The court held:

“We come then to the question of the license.
(4) It appears from the evidence of Mr. Johnson as follows:

“‘Q. 108. Do you know why the Victor Talking Machine Company took a license under the Jones patent No. 688,739? A. At the time the Jones patent was issued the Victor Company had a large quantity of goods on the market. We had no opportunity of avoiding this patent because we did not know of its existence. I therefore sought a license as a matter of insurance. I felt that such course was necessary because of the great value of the goods in question. I never infringe a patent or run the risk of an adverse patent decision where any other course is possible.’

“On cross-examination (C. Q. 142) he made the same statement as to reason for taking the license. Johnson also says his patent here in suit, No. 896,059, had not issued when such license was taken, and that neither he nor the Victor Company had any assurance it would issue. The license whatever it was, is not in evidence. Its terms and conditions are not before this court. I am unable to see how a license under the Jones patent to the Victor Company taken before the patent in suit to Johnson had issued and when it was not known it would issue and obtained by Johnson for the Victor Company estops either the Victor Company or Johnson from asserting their rights under the Johnson patent when it did issue, even if its assertion amounts to a repudiation of the validity of the Jones patent. **I am not aware that a licensee under a patent is estopped to purchase a valid patent subsequently issued to another, and which, if asserted, shows the prior patent under which the license was taken to have been invalid and anticipated, and then assert such patent by suit against all infringers including the licensor. I am not pointed to any case so deciding. It is true that a licensee in a suit for royalties agreed to be paid cannot set up and prove as**

a defense the invalidity of the patent, assuming there is no outstanding decision against the validity of such patent. *United States v. Harvey Steel Co.*, 196 U. S. 310, 25 Sup. Ct. 240, 49 L. Ed. 492; *Kinsman et al. v. Parkhurst*, 18 How. 289, 292, 293, 15 L. Ed. 385; *Eureka Company v. Bailey Company*, 11 Wall. 488, 20 L. Ed. 209. **However, this does not decide that a licensee cannot become the owner of a valid patent covering the same invention after he takes his license and prosecute all infringers.** It would seem to me clear that, if Johnson had retained title to this patent here in suit, he could have prosecuted the Victor Company for infringing it, or any other company or corporation in which he held stock (assuming they actually infringed). His owning stock in such a corporation or a majority of the stock would not carry to it the right to use his inventions except with his consent. He could transfer his patent or inventions to the Victor Company as he did, and it seems to me the rights of that company under it are not affected by the license referred to, the terms of which do not appear. True, this suit is an indirect attack on the Jones patent. But Johnson had no property right in his invention which he could enforce prior to the issue of this patent in 1908. *Gayler v. Wilder*, 10 How. 477, 493, 13 L. Ed. 504; *Marsh v. Nichols Shepard & Co.*, 128 U. S. 605, 612, 9 Sup. Ct. 168, 32 L. Ed. 538. I have no doubt that the question of Johnson's priority of invention could have been set up in the suit referred to on the Jones patent. But it was not pleaded or made an issue and as the defendant there did not own the invention and the Victor Company did not, and Johnson was a mere stockholder and did not assume the defense, and the patent had not issued, I am unable to see that this complainant, the Victor Talking Machine Company, is estopped to assert the Johnson patent because of its position as licensee under the Jones patent."

Webster Electric Company of Wisconsin Is Clearly Entitled to the Benefits of the Contract and Subject to Its Liabilities.

In the courts below defendants argued that plaintiff has given to the assignment clause of contract D the interpretation which it now denies to defendants—that is, defendants argued that the plaintiff, Webster Electric Company of Wisconsin, claims a license under the Podlesak patents by an assignment of contract D from the Webster Electric Company of West Virginia, while at the same time denying to the Podlesaks and defendants the right of assignment of that contract. The two situations, however, are wholly different.

It is conceded by every one that the assignment clause cannot be simply struck out of the contract by interpretation, but we insist that it must be interpreted in accordance with the intention of the parties and in such a way as to be consistent with the other provisions of the contract. Even if the Webster Electric Company of Wisconsin were an organization distinct from the Webster Electric Company of West Virginia (which it is not) the fact would remain that if the Webster Electric Company of West Virginia could not transfer its license under the Podlesak patents, the assignment clause of the contract would be entirely meaningless and inoperative as to the grantee. That is, the license granted to the Webster Electric Company by the contract is the only right secured to it which it could transfer for value to an assignee and consequently unless that right was assignable, the assignment clause would be meaningless.

On the other hand, the language of the contract clearly makes the right of the Podlesaks to operate under the patents personal to “themselves,” but the assignment

clause is still fully operative to enable them to transfer the title to the patents and the very valuable right to receive royalties from the Webster Electric Company. Unless the assignment clause enabled the Webster Electric Company to transfer its license, the clause would be meaningless. If that assignment clause enables the Podlesaks to transfer the personal right reserved to "themselves," all of the other provisions of the contract become meaningless. But the assignment clause remains effective and fully operative if it permits the Podlesaks to transfer the title to the patents and the right to receive royalties, while not permitting them to transfer their reserved personal right.

We further maintain, however, that the Webster Electric Company of Wisconsin is not dependent upon an assignment of the license granted in contract D but is entitled to the full benefit of that contract because it is the successor of the Webster Electric Company of West Virginia.

The amended bill of complaint alleges that the Webster Electric Company of Wisconsin is the successor of the Webster Electric Company of West Virginia (R. Vol. 1, 796). The plaintiff's business is the same business founded in 1905 by Mr. T. K. Webster, which was first operated under the name of Webster Manufacturing Company and which then became known as the Hertz Electric Company and which later was named Webster Electric Company, first as a corporation of West Virginia and subsequently as a corporation of Wisconsin. Throughout all of these changes of name, the president and guiding spirit of the organization has been Mr. T. K. Webster, and the business has been indistinguishably the same. The change from incorporation in West Virginia to incorporation in Wisconsin where the business

is located was made for the sole purpose of simplifying legal formalities. The stockholders remained identically the same; the directors and officers were the same; the factory and employees were the same; and the Wisconsin organization not only took over the entire assets of the West Virginia organization but also assumed all of the liabilities and obligations of whatsoever kind (R. Vol. 1, 435, 436, 707).

Under these conditions, it is settled that the license of the Webster Electric Company of West Virginia has passed to its successor, the Webster Electric Company of Wisconsin, even without an assignment.

Lane & Bodley Co. v. Locke, 150 U. S., 193; 14 Sup. Ct. Rep., 78.

Wilson v. Wilson Corporation, 241 Fed., 494.

In the latter case, the court said:

“The suggestion that the right in and license to use said letters patent is a personal one, existing in favor of the James G. Wilson Manufacturing Co., and does not, in the absence of an express contract, pass to the defendant company, is not well taken, and cannot be maintained, for the reason that the defendant company is but a continuation of its predecessor company, and the complainant in good faith and fair dealing is as completely estopped from claiming the right here set up against one as the other.”

The exercise of the license by the Webster Electric Company after its formal change of charter from West Virginia to Wisconsin has been acquiesced in by defendants. The Wisconsin company's bill of complaint was filed October 25, 1918 (R. Vol. 1, 184), and that bill alleged the rights of the Wisconsin company under the Podlesak contracts. The Splitdorf Company filed its answer by its solicitor G. H. Peaks and others on December 4, 1918 (R. Vol. 1, 198). On January 13, 1919,

however, the same George H. Peaks, as attorney for the Splitdorf Company, received and accepted from the Webster Electric Company of Wisconsin, a check for \$6,728.90 for current royalties due under the Podlesak contracts (R. Vol. 1, 506, Vol. 11, 101). It further appears that Mr. Peaks forwarded this check to his principal, the Splitdorf Company; that it was deposited by the Splitdorf Company, and paid by the Webster Electric Company of Wisconsin in the regular course of business.

In any aspect of the matter, therefore, whether by acquiescence and estoppel, or by right of successorship, or by right of assignment pursuant to the terms of the contract, plaintiff is entitled fully to enjoy the rights and benefits granted by contract D. On the other hand, while the defendants are entitled to be recognized as the owners of the legal title to the Podlesak patents and of the very valuable right to receive large and continuing royalties from Webster Electric Company, and of the right of reversion upon default by the Webster Company, they are not entitled to exercise the personal right of the Podlesaks "themselves" to make, use and sell the patented devices and thus render purposeless all of the provisions of the contract. A conclusion to the contrary will be utterly destructive of the plain language and intent of the contract and of the business of the Webster Electric Company built up in reliance on that contract.

Defendants' Infringement Is a Tort Coupled With Malice—Plaintiff's Damages Should Be Trebled.

The Splitdorf and Sumter Companies had nothing to do with the invention, development or commercial introduction of the meritorious unitary ignition equipment covered by the Kane and Podlesak patents in suit. In

the year 1915 they simply pirated that equipment after the Webster Company had spent ten years in bringing it to a high state of perfection and into wide spread public favor. Seldom has the attention of the courts been directed to a more wanton theft of an important invention.

The defenses which the Court of Appeals recognized, and the only ones which we think will be urged in this court, are highly technical. If these technical defenses are found to be without merit, we ask your Honors to rule as to whether or not the Splitdorf and Sumter Companies (now one, R. Vol. 1, 491) shall be required to answer their torts in trebled damages.

Section 4919 R. S. authorizes the law courts of the United States to enter judgment for trebled damages in appropriate patent cases. It is well settled that our equity courts have the same power.

Waterman v. McKenzie, 11 Sup. Ct., 334, 337; 138 U. S., 152.

Root v. Railway Company, 105 U. S., 189.

The original and supplemental bills of complaint pray that defendants be required to respond in trebled damages (R. Vol. 1, 36, 197).

The appropriation by the Sumter and Splitdorf Companies of the equipment of the Kane and Podlesak patents was calculated and deliberate. In 1911 the Sumter Company marketed a non-unitary oscillating magneto equipment (addendum page 37) similar to the Webster Company's unsuccessful non-unitary equipment (addendum page 36) which was supplanted by the Kane invention in 1909. The Sumter Company abandoned its non-unitary oscillating equipment and in the years 1913 and 1914 sold a rotary magneto in competition with the unitary equipment of the Webster Company. During

1913 and 1914 the Sumter Company did all in its power to divert public favor from the Webster Company's patented equipment. One of the constituents of the patented equipment is an *oscillating magneto*. The Sumter Company denounced oscillating magnetos generally and the Webster Company's patented equipment in particular during 1913 and 1914. (See pages 38 to 41 of the addendum to this brief for reproductions of the pertinent parts of Exhibits 25, 26, 28 and 32.)

But after the Webster Company had firmly established its unitary equipment in the public favor, the Sumter and Splitdorf Companies in 1915 deliberately pirated that equipment. The slavish and wanton character of their infringement is apparent from a comparison of plaintiff's commercial device with the infringing devices. For instance, compare illustration of plaintiff's device on page 17 of this brief with the infringing device illustrated on pages 43 to 49 of the addendum hereto. The wanton character of the infringement is practically admitted for the defendants do not deny that their devices are described by *eighteen* claims of the patents in suit. Many of these claims describe plaintiff's commercial equipment in most minute detail. The defendant companies took structural details along with the generic invention. *All this occurred before the Sumter and Splitdorf Companies acquired any shadow of right or title under the Podlesak patents.*

The seduction of the Podlesaks for \$65,000 in cash only aggravated an unconscionable infringement. By acquiring title to the Podlesak patents (and thereby becoming the recipients of large royalties from the Webster Company) the Sumter and Splitdorf Companies assumed a moral obligation to play fairly with the Webster Company. But, instead of dealing with the Webster Company, *their licensee*, with the good faith which equity and common decency de-

mands, they started out to destroy the Webster Company! By selling their infringing equipment (on which they paid no royalty) in competition with the Webster equipment (on which the Webster Company paid *them* a royalty) they very nearly put the Webster Company out of business. In the years since the trial, the Webster Company has barely been able to survive under the handicap imposed upon it by the unconscionable conduct of its licensors.

The malice which prompted the Sumter and Splitdorf Companies first to pirate the unitary equipment without a shadow of legal justification, and then to seduce the Podlesaks, is eloquently evidenced by a letter which passed between representatives of the defendant companies in the interim between the execution and the filing of the bill of complaint in the suit under the Podlesak re-issue patent which was instituted against the Sumter Company on August 21, 1915 (R. Vol. 2, 98). The complaint was executed by Emil Podlesak on August 3, 1915 (R. Vol. 2, 36). On August 10, 1915, F. C. Manning (then sales manager of the Sumter Company and afterward general sales manager of the Splitdorf Company) wrote a letter to H. R. Van Deventer (treasurer and general manager of the Sumter Company and afterward connected with the Splitdorf Company). The most pertinent parts of this letter (which appears in full at page 98 of Volume 2 of the Record) read as follows (emphasis ours):

“August 10, 1915.

“Patent Matters.

“*Dear Van:*

“Although I am terribly rushed today trying to get things in shape to leave for Nebraska tonight, H. J. Podlesak dropped in and gave me a chance to find out what he knew about Webster’s latest move. H. J. brought in his new oscillator to show me.

.

"I asked H. J. what he knew of the patent Webster Company is claiming as anti-dating the Dixie. He says it is the old Varley idea which has been modified to some extent by the *original Webster Company's engineer, one Milton, the exploits of whom nearly wrecked the old Webster Mfg. Co.* This fellow, Milton, he says is the chap who got him (H. J. and his brother Emil) into the Webster organization because of Milton's infringement of the Podlesak patents, the matter having been finally adjusted by Podlesak giving the Webster people a license, their royalties to be not less than \$5,000 per year. This year it will run to \$12,000 he says.

"I think I have scared H. J. pretty well out of the idea of manufacturing his own new machine, but from what I could get out of him today, it appears he has the right under his agreement with the Webster Co. to manufacture any of the Podlesak magneto outfits himself or to sell his patent with this right to manufacture and sell without interference from the Webster Electrical Co. Brown (General Manager of Webster Company) would probably dispute this, but he says his contracts with the Webster Co. will make clear his rights as stated in the premises. Now, if Brown (the Webster people) gets too obstreperous, and if the bad feelings between Brown and Podlesak continues to brew as at present, I think H. J. and Emil will be in the frame of mind to consider such negotiations with us as would let us right into the Webster business, and with their line and the plug oscillator, we sure would be in shape to command the field. I don't think Podlesak would expect anything like royalty he is collecting from the Webster Co., and besides this Brown is getting 5% on the gross sales, besides his salary.

It is pretty tough on me, with these matters coming up and without my knowing anything of what has been going on down in New York, beyond what you wrote me the other day, so I hope you will advise me fully in the premises. **I certainly wish you and Mr. Clement** (attorney for Sumter and Splitdorf Companies) **would get out here together as I believe we could have a very interesting 'round' with the Podlesaks.**

"Hope you can get some sense out of the above, all of which I have run off in a hurry and on an empty stomach too, as haven't had time to get out to lunch today.

"Hastily,

"FCM WK # 40."

The seduction of the Podlesaks followed promptly after the opening of negotiations as reported in this letter.

We submit to your Honors that the infringement here, both before and after the seduction of the Podlesaks, has been most wanton and was prompted by malice of the most reprehensible character.

If Judge Sanborn, who saw and heard all the witnesses in this case, had survived to enter a judgment following an accounting in this case, we are confident that he would have trebled the damages reported by the Master. The dignity of outraged justice and decency, the moral turpitude displayed by the representatives of the defendant companies and the grievous wrong which the Webster Company has suffered, demand that punitive damages be assessed in this case.

But Judge Sanborn is gone. Therefore, we submit that your Honors in affirming his decree can, and properly should, direct his successor on the bench to impose punitive damages commensurate with the outrageous conduct of the defendant corporations.

Conclusion.

The decree of the trial court, finding claims 7 and 8 of the Kane patent and the involved claims of the Podlesak patents valid and infringed, should be *affirmed*, and the decision of the Court of Appeals should be *reversed*, because:

(a) The Court of Appeals was not justified in de-

claring Kane's claims 7 and 8 void under the authority of *Chapman v. Wintroath*.

(b) Both courts below were right in holding that Kane's claims 7 and 8 describe a meritorious invention of the patentee.

(c) Our adversaries admit that Kane's claims 7 and 8 are infringed, if valid.

(d) The right to make, use and sell the invention of the Podlesak patents, which contract D reserves to the Podlesaks "themselves" was not assignable to the Sumter and Splitdorf Companies.

(e) Our adversaries are estopped to deny, and do not deny, the validity of the Podlesak patents, and do not deny that the inventions of these patents have been manufactured and sold by the defendant companies.

The actual damages sustained by plaintiff should be trebled in view of the wanton and malicious character of the infringement.

Respectfully submitted,

LYNN A. WILLIAMS,
ALBERT G. McCaleb,
For Plaintiff-Petitioner.

ADDENDUM.

BOTH COURTS BELOW WERE RIGHT IN HOLDING THAT KANE'S CLAIMS 7 AND 8 COVER A NOVEL AND MERITORIOUS INVENTION.

The Purpose of the Kane Invention and Its Astounding Success.

Prior to the spring of 1909 the Webster Electric Company was manufacturing more or less experimentally and furnishing to its sole customer, the International Harvester Company, an oscillating magneto of which a specimen is in evidence as Plaintiff's Exhibit 11 (R. Vol. 2, 242, 388, 513). This device is illustrated at page 36 of this addendum (Ptffs. Ex. 13).

In that old type of equipment the magneto was fitted onto a boss on the side of the engine cylinder, and the igniter plug, in which were mounted the fixed and movable electrodes, was fitted into an opening in the cylinder at a point removed from the magneto. The movable electrode was operated by link mechanism connecting it with the magneto armature. The magneto was heavy and would not stay in position on the boss, so that any slight angular variation of the magneto on the boss would necessarily destroy the synchronism between the separation of the electrodes and the cycle of the engine, and between the separation of the electrodes and the recoil of the magneto armature (R. Vol. 1, 513, 514, 243). Mr.

Waterman, who at that time was the superintendent of the Milwaukee works of the International Harvester Company, testified (R. Vol. 1, 230):

“Well, in a word the real difficulty of the older form was that it very soon and very seriously was out of order. It failed to work properly.”

Mr. Waterman and other witnesses related the trials and tribulations that both the Webster Electric Company and the International Harvester Company had in those days with such equipment as Plaintiff's Exhibit 11—trials so serious that the Webster Electric Company seemed about to lose its only customer, and to fail entirely in its business (R. Vol. 1, 236, 243, 513, 514).

The International Harvester Company was receiving so many complaints about the Webster magneto that the subject was thoroughly investigated, and on March 15, 1909, Mr. Waterman wrote to the experimental department of the Harvester Company at Chicago a full report of the defects and troubles of the Webster magneto, concluding (R. Vol. 2, p. 1):

“The Webster people should thoroughly overhaul the entire outfit, and they should correct troubles covered by these statements submitted above. It may possibly be satisfactory to continue shipment of the Milton magneto in accordance with present practice, but unless these unsatisfactory conditions are corrected we have good reason to consider it necessary to arrange for some substitute for this magneto for use on our engines,—entirely on the ground of defects developed.”

At this juncture Mr. Kane invented the **unitary magneto ignition equipment** of his patent in suit. Suffice it to say here that after thoroughly testing the magneto furnished by Mr. Kane, Mr. Waterman reported to the experimental department on June 11, 1909, saying (R. Vol. 2, p. 3):

"The magneto as now presented seems to work well, and except for the fact apparatus of this nature is rather delicate when continuously exposed to dust and moisture, we see no reason why it should not prove reasonably satisfactory, electrically and mechanically."

The new magneto did prove abundantly satisfactory, the sales being in 1912, 8956; in 1913, 11,450; in 1914, 11,458; in 1915, 46,444; in 1916, 91,445; in 1917, 106,773, and in 1918, 129,785 (R. Vol. 1, 474). The original specimen of the apparatus invented by Mr. Kane is in evidence as Plaintiff's Exhibit 12 (R. Vol. 1, 231). In this device **the magneto and the igniter plug are no longer separated, but are brought into one unitary structure**, with no link mechanism intervening between the movable electrode and the armature shaft, such as existed in Plaintiff's Exhibit 11. The spark plug has a flange, which is bolted against the engine cylinder, and this flange carries an integral arm, on which the magneto and its associated mechanism are directly mounted. In this construction, when the armature shaft recoils, a yoke carried by it directly strikes an arm fixed to the movable electrode, thus causing an instantaneous separation of the electrodes in precise and inherent synchronism with the recoil of the armature. The magneto and the spark plug and the co-operating mechanism are all part of a single unitary structure. When it is necessary to clean the spark plug or to test or adjust the mechanism, the whole unitary structure may be removed, and its operations adjusted and its spark observed in the open, and it may then be put back on the engine with absolute assurance that it will function in operative position, precisely as it did when removed from the engine (R. Vol. 1, 451).

THE PRIOR ART.

Judge Sanborn found it unnecessary in his opinion to discuss the prior art as affecting the validity of the claims in issue of the Kane patent. It is perfectly obvious that any similarity the defendants may now seek to find between the Kane invention and prior patents is but knowledge after the fact. Kane and Milton and the other engineers of the Webster Electric Company, and also the engineers of the International Harvester Company, were undoubtedly better versed in the art of single-cylinder gas engine ignition in the spring of 1909 than any other engineers in the United States. Despite this fact, the problem of satisfactory magneto ignition seemed insoluble to all of them, and the Webster Electric Company was about to expire.

At this juncture, in April, 1909, Mr. Kane invented the unitary magneto ignition equipment disclosed in the patent in suit. The mechanical and commercial results were instantaneous and astounding. Probably your Honors have never had before you a case in which the proof, not only oral, but documentary, showed an invention so remarkably turning failure into success. If ever there was a case in which the facts surrounding the invention demonstrated that the prior patents brought forth by infringers as anticipations were not such in fact, this is that case.

Miscellaneous Prior Patents.

Defendants suggestively, but without insistence, presented the patents to Olds, No. 635,506, Dickinson, No. 754,286, and Cooper, No. 773,062. None of these patents relates to magneto ignition. Each of them discloses a construction in which the electric current for producing

the igniting spark in an engine cylinder is furnished by batteries, and consequently they have nothing to do with the type of apparatus involved in this suit (R. Vol. 1, 763). These battery ignition patents represent the very problem every one was trying to solve.

Defendants also present by way of suggestion the Milton patent No. 1,053,107, and the Hennig patent No. 916,312. The Milton patent illustrates the old Webster magneto, which was finally condemned in Mr. Waterman's letter of March 15, 1909. These patents illustrate the problems which were baffling the engineers of the Webster Electric Company and the International Harvester Company in 1908 and 1909, and it was the failure which such constructions threatened that Kane averted and turned into success by his invention of the unitary magneto ignition equipment (R. Vol. 1, 763).

Wattles Patent.

Defendants also present the Wattles patent No. 909,264. When testimony concerning that patent was being offered Judge Sanborn said (R. Vol. 1, 762):

"I don't care to spend much time on this patent. It has an entirely different mode of operation."

In the Wattles patent the rotor of the magneto is oscillated by a piston in a small cylinder connected with the engine cylinder by passages extending through the spark plug. When the spark plug is removed from the engine for cleaning or for inspection of the operating mechanism, it is entirely impossible to operate the device in any such way as it is intended to be operated. It is obviously in no sense a unitary magneto ignition equipment, such as that invented by Mr. Kane (R. Vol. 1, 761).

Furthermore, at the very time that the International

Harvester Company was so out of patience with the old Webster magneto, it was also experimenting with the Wattles magneto of this patent, in conjunction with Mr. Wattles himself. On February 16, 1909, Mr. Waterman reported that "If this Wattles magneto is to be considered suitable for use on our engines, it must be completely redesigned" (R. Vol. 1, 334). Mr. Waterman testified at the trial that the Wattles magneto operated on an entirely different principle from the Webster magneto, and despite the fact that Mr. Wattles himself experimented with his magneto for several months at the shops of the International Harvester Company, the magneto never emerged from the experimental state, and was never adopted by the Harvester Company (R. Vol. 1, 238, 293.)

Weber Patent Admittedly Unanticipatory of Kane Claims 7 and 8.

Defendants also urged that the Weber patent* No. 820,535 offered a solution of those baffling problems which were so admirably solved by the Kane unitary magneto ignition equipment.

The Weber construction is in no sense a unitary magneto ignition equipment, and defendant's expert, Mr. Carter, admitted that it was not (R. Vol. 1, 695). Plaintiff presented in its Exhibit No. 76 a model made in strict accordance with the disclosure of the Weber patent (R. Vol. 1, 748). Defendant presented in its Exhibit No. 52 a modified illustration of the Weber construction (R. Vol. 1, 729). These two models are alike in exhibiting one vital defect. Looking at Figures 1 and 7 of the Weber

* The Court of Appeals, in its first opinion, held Kane's claims 7 and 8 anticipated by Weber but recanted in its second opinion. See plaintiff's petition and brief on rehearing (R. Vol. I, 851).

patent (R. Vol. 2, 768), the armature shaft 15 is cocked by the push-rod 35 through the medium of the slide 33 and the rod 39. This compresses the main spring 50 and when the push-rod is tripped from the slide, the recoil of the main spring 50 oscillates the armature and separates the electrodes. It will be noted that the slide 33, with its rod 39, and the main spring 50, are supported on a shelf 31-49, secured to the engine cylinder, while the magneto and the spark plug are secured to the engine cylinder entirely separately. Both Plaintiff's Exhibit 76 and Defendant's Exhibit 52 exhibit this construction.

It is at once obvious that if the magneto and spark plug are removed from the engine for inspection or adjustment, the main spring—the operative element of the whole device—is lacking (R. Vol. 1, 695, 750). There is an entire absence of the unitary magneto ignition equipment of the Kane patent which can be removed from the engine as a unit, and operated in its normal and intended way in the open, so that the spark produced can be observed, and so that the device can be properly adjusted and replaced on the engine with assurance that it will operate precisely as it did in the open.

Defendants' expert attempted to argue that the device of the Weber patent, despite the absence of the main actuating spring, could be tested by hand operation, but he, of course, had to admit that in normal actuation by the spring the armature moved very much more rapidly than when moved by hand, and he was unable to tell whether, when the armature was operated by hand, the peak of the current wave occurred at the same position as it would occur when operated in normal manner by the spring (R. Vol. 1, 728).

Plaintiff's expert, on the other hand, demonstrated that hand operation of the Weber device removed from

the engine could give no indication of what its operation would be when replaced on the engine and operated by the main spring (R. Vol. 1, 750). He pointed out that twisting the armature by hand does not at all reproduce either the velocity or the uniformity of speed normally secured by the main spring, and that consequently the character of the spark is entirely different, because there is a difference in the phase relation between the current and the movement of the armature, and a difference in the voltage. For instance, there may be carbon dust about the electrodes tending to short-circuit them. If the device is operated with low voltage (as the Weber device necessarily would be when removed from the engine and operated by hand) there may be a spark, for the reason that with the low voltage the current is not sufficient to jump across the collected carbon. When, however, the device is replaced on the engine and operated at much higher voltage by the main spring, the voltage may be such as to bridge or jump across the collected carbon and prevent the formation of any effective spark at the contacts. In other words, when removed from the engine and operated by hand, the device may produce an observable spark, but when replaced on the engine and operated at normal speed and voltage, no effective spark will be produced, and the short-circuit will entirely prevent ignition (R. Vol. 1, 751, 752).

Plaintiff's expert also explained at length (R. Vol. 1, 753-761) that the difference in phase relationship between hand and engine operation entirely prevents comparing the sparks thus produced, and consequently hand operation does not enable an observer to ascertain whether an effective spark will be produced by engine operation. The importance of this matter and of the futility of attempting to judge the spark produced by engine operation by observation of the spark produced by hand op-

eration was not given by plaintiff's expert as a mere matter of opinion, but was scientifically demonstrated by accurate measurement with an oscillograph, the resulting oscillogram and diagrams being introduced in evidence as Plaintiff's Exhibits Nos. 77 and 78. (R. Vol. 2, 141, 143).

The claims of the Kane patent specify the mounting of the main actuating springs, as well as the other operative elements, as a unit with the magneto and the spark plug, so that the whole device constitutes a unitary magneto ignition equipment removable from the engine as a unit and operable when removed, under precisely the same conditions as when in place on the engine. It is obvious that the Weber device is not a unit and cannot be normally operated when removed from the engine, because, as defendant's expert admits, it must be removed in at least two pieces, one consisting of the magneto and spark plug, and the other of the main actuating elements (R. Vol. 1, 695).

Additional Reasons Why the Weber Patent Does Not Anticipate the Kane Claims.

But this is not all, for the fact is that the Weber device is not removable from the engine even as two pieces, but must be removed as three.

Looking at Figures 1 and 3 of the Weber patent (R. Vol. 2, 768, which are accurately reproduced in Plaintiff's Exhibit 76), the court will see that the spark plug is carried in a block 3 fitting against the engine cylinder, and that the magneto is carried on a plate 13, secured to a bracket 53, having a flange 54 secured against the block 3. Looking at Figure 3, there is a single bolt at the top of block 3, and two bolts extending through the flange 54 and the block 3 at the bottom. It is obvious that all

three of these bolts extend through the wall of the engine cylinder to secure the several parts in position. In removing the device from the engine, removal of the two bolts at the bottom would separate the bracket 53, carrying the magneto and its armature, and subsequent withdrawal of the bolt at the top would permit the separate removal of the block 3 carrying the spark plug. Obviously when this Weber device is removed from the engine, we would necessarily have not two pieces (which in itself would entirely prevent realization of the advantages of the Kane invention), but three pieces, consisting of the magneto and its armature as one piece, the spark plug, with its operating arm, as another piece, and the main actuating spring as a third piece (R. Vol. 1, 748).

Defendants' expert attempted to overcome this vital defect by saying that the shelf carrying the magneto could be rigidly united with the block carrying the spark plug, so that the two united pieces might be secured to the engine cylinder by the single bolt at the top of Figure 3. He admitted, however, that if this were done, the plug would have to be tapered (as it is in Defendant's Exhibit 52), in order to make anything like a rigid and gas tight connection, and that such a tapered plug was not in use prior to 1909. He further failed to state what use Weber could intend for the two lower bolts in Figure 3, unless they extended through the block 3 to the inner side of the engine cylinder (R. Vol. 1, 729-731).

Plaintiff's expert pointed out that the Weber patent discloses no such tapered plug as defendants' expert used in Defendants' Exhibit 52, and that Figures 2 and 3 of the Weber patent show the two attaching bolts at the bottom and the third attaching bolt at the top to be uniform, and holes to be smooth bored. If a tapered plug

(such as was not known in the art at the time of Kane's invention) were not used to attach the igniter block to the engine, it would be necessary to secure packing material between the block and the cylinder wall. The pressure in the cylinder, however, at the time of the explosion, ranges up to two or three hundred pounds, and if the igniter block were only secured by one bolt, this pressure would not only be decidedly liable to break the igniter block, but certainly a suitable degree of compression could not be secured in the engine cylinder if the block and packing were insecurely clamped, as they necessarily would be if only one bolt were used (R. Vol. 1, 749).

Since, therefore, the Weber patent illustrates a device that admittedly has to be removed from the engine, with the separation of at least two of the main elements, and that obviously can only be removed by the separation of all three of the main elements, there can be no doubt that the Weber patent does not anticipate Kane's invention of a unitary magneto ignition equipment.

Defendants further argue that if the type of magneto shown in the Milton and Hennig patents were substituted for the magneto proper of the Weber patent, the device so modified would have a self-contained spring. There is nothing in the Weber patent to suggest how such a substitution could be made. But, furthermore, both the Milton and Hennig patents show just the contrary arrangement, in which the spark plug and the magneto are mounted entirely separately of each other (R. Vol. 1, 762).

Defendants in the court below casually asserted in their brief that the International Harvester Company has stopped purchasing Webster magnetos and insinuates that this is due to the Weber device. Neither that assertion nor insinuation is true.

Defendants cited Mr. Cox as authority for its assertion, but Mr. Cox admitted that this was merely his understanding and that he was not in a position to know definitely about the matter (R. Vol. 1, 715-716). It was subsequently proved, however, that the International Harvester Company was buying thousands of Webster magnetos in each year right up to the time of trial (R. Vol. 1, 792).

As to the so-called Weber device, which defendants insinuate came into use, Mr. Cox said that the Accurate Engineering Company (with which he was formerly connected) commenced in 1915 to manufacture a magneto ignition equipment and purchased the Weber patent. These equipments were only experimental and unsuccessful, however, and even those did not follow the Weber patent, but were modified in view of plaintiff's device, with which Mr. Cox and the Accurate Company were then familiar. The Accurate Company, after discarding this experimental device, commenced to manufacture a device in which the entire equipment was mounted on and carried as a part of the igniter plug (R. Vol. 1, 715-720).

INFRINGEMENT.

Defendants Condemned Oscillating Magnetos Until Success of Kane Invention Was Demonstrated, and Then Merely Copied Plaintiff's Equipment.

The Sumter Electrical Company at Charleston, South Carolina, commenced to manufacture magnetos about 1907, and in 1910 and 1911 it was manufacturing and advertising (Plaintiff's Exhibit 24*) an oscillating magneto not unlike the old magneto discarded by the Web-

* See page 37, *infra*.

ster Electric Company at the advent of the Kane invention. That Sumter magneto was unsuccessful, and so during 1912, 1913 and 1914 the Sumter Company changed its policy and distributed advertising booklets condemning the oscillating type of magneto such as the Webster Company was then manufacturing, embodying the Kane invention. For instance, the Sumter pamphlet, Plaintiff's Exhibit 26,* issued in 1913, states, referring to oscillating magnetos (R. Vol. 1, 406):

"We furnish a full line of this type formerly so popular, but wish to state that owing to the high efficiency of our standard rotary types, and the fact that we can meet every requirement with the rotary machine, oscillators are no longer so desirable, as they have certain inherent disadvantages not possessed by rotary machines.

"We will be pleased to correspond with manufacturers now using oscillators, who desire to change to the more simple and efficient rotary type."

This advertising and condemnation of the oscillating magnetos continued into 1914, as is evidenced by Plaintiff's Exhibit No. 28,† a Sumter booklet issued in February, 1914. (R. Vol. 1, 407.)

During 1914 and 1915, however, the years of effort of the Webster Electric Company began to be rewarded. The Webster Electric Company's sales of the Kane equipment jumped from 11,458 in 1914 to 46,444 in 1915, and continued to grow rapidly in succeeding years (R. Vol. 1, 474). The Sumter Company viewed this success with envious eyes, and it therefore threw aside its condemnation of the oscillating magneto and in 1915 started to manufacture an equipment substantially in duplication of that manufactured by the Webster Electric Company since 1909. Defendant devised nothing new, but entered the field as an acknowledged infringer. It

* See page 39, *infra*.

† See page 40, *infra*.

changed its entire policy, and in its exploitation and advertising vigorously pushed the oscillating magneto equipment which it had substantially copied from the plaintiff's equipment. (R. Vol. 1, 418, 410, Plaintiff's Exhibit* 41.)

The Splitdorf Electrical Company was controlled by the same stockholding interests who controlled the Sumter Electrical Company, and was engaged in a generally similar business. As the infringing sales of the Sumter Electrical Company increased, the Splitdorf Electrical Company, apparently desiring to reap this harvest, took over the entire business of the Sumter Company in 1915 (R. Vol. 1, 486, 487, 491, 492).

The decree of the trial court finds that the defendant's machines, types A, B and C, which respectively are Plaintiff's Exhibits 44, 79 and 45, each infringe claims 7 and 8 of the Kane patent, and certain claims of the Podlesak reissue patent No. 13,878, and that additionally the Type A and Type B machines† infringe certain claims of the Podlesak patent No. 1,101,956 (R. Vol. 1, 808). Defendants do not attempt to dispute, either by testimony or argument, that the defendants' machines clearly embody claims 7 and 8 of the Kane patent and the claims of the two Podlesak patents, as specified in the decree.

Defendants did not mince matters when the final success of the Kane equipment manufactured by the Webster Electric Company since 1909 led them in 1915 to cast aside their condemnation of such equipments and embark on the infringing business. They boldly and slavishly appropriated the successful features of the Webster Electric Company's unitary magneto ignition equipment and just as boldly commenced a campaign to pirate the Webster Electric Company's market.

* See page 43, *infra*.

† The trial court also found claim 3 of Kane infringed, but this is a relatively unimportant claim and, solely to simplify the issues, is not discussed in this brief.

KANE, NOT MILTON, IS THE INVENTOR.

Judge Sanborn Found That "The Evidence As a Whole Is Overwhelming That Milton Was Not the Inventor, and That Kane Was." The Court of Appeals Did Not Disturb This Finding of Fact.

The trial of this case in open court lasted over two weeks, and the testimony of most of the witnesses related to the question of inventorship of the unitary ignition equipment by Kane or Milton. Mr. Milton was on the stand much longer than any other witness. Judge Sanborn wrote his opinion the day after the trial ended, while the testimony and the demeanor of the witnesses were fresh in his mind, and he held (R. Vol. 1, 803):

"The evidence shows the following: Both Milton and Kane were plaintiff's employees. Milton was Kane's superior, being employed as an engineer and inventor, whose inventions were to belong to plaintiff. During the year 1909, up to August 20, he was working on a high tension magneto for variable speed, multi-cylinder gas engines, which gave great promise, and was the means of securing a large contract for plaintiff with the Cadillac Company, but which was a failure. He was also paying some attention to the low tension magneto for hit and miss engines.

"In April, 1909, the magneto produced by plaintiff called the Milton Magneto,* proved unsatisfactory,

* Defendants' brief in the Court of Appeals, in referring to the defense that Milton instead of Kane made the invention in issue, sought to mislead the court by repeatedly stating that for many years the Webster Company advertised this revolutionizing invention as the "Milton Magneto." No one now contends that the invention in issue was made until April, 1909, but prior to that time plaintiff's product was advertised and known as the Milton magneto, because the generator itself embodied certain earlier Milton inventions. (See the letter and pamphlet at pages 1 and 11, Vol. 2, of the Record, and also the 1907 contract regarding the "Milton Improvements" at page 113, R. Vol. 2) The name "Milton Magneto" had nothing whatever to do with the origin of the invention in issue.

and there was danger of plaintiff losing the business of supplying it to its chief user, the International Harvester Company. Mr. Webster, the president of the plaintiff, urged Kane, and another employee by the name of Chiville, to try to produce a device which would solve the difficulty. Kane worked the matter out on April 11, 1909, made an incomplete drawing and brought it to plaintiff's office. He followed this by a complete drawing made April 14, 1909, showing the new device in full detail. He exhibited the first drawings to his father, then employed by the Harvester Company, and to persons in the office, and the later drawing to Mr. Chiville and others, and a device made according to the later drawing was produced shortly after, put on an engine and worked satisfactorily. None of these facts is in dispute, but Milton testifies that the idea was his and not Kane's, and that the latter made the last drawing under his direction. Kane produced both of the drawings, they bear his name and the dates, and he is corroborated by his father, who produced his diary showing the date appearing on the first drawing, both of which are in evidence. Milton's testimony that the drawings were made under his direction is not corroborated, except by slight circumstances unsatisfactory in their character, and is inconsistent with his testimony and conduct in the Kane-Milton interference proceedings in the Patent Office. In those proceedings he put the date of his disclosure in August, 1908. On this trial he adopted Kane's date. He took very little interest in the interference proceedings, but refused to concede priority to Kane. His American patent was owned by plaintiff, so he had no interest in showing priority, except the pride of an inventor. He produced no drawings showing his alleged discovery other than those in the English patent made in October, 1909; no original drawings whatsoever, no corroboration of his claim to invention. While the correspondence in 1909 between him and Mr. Webster shows that he took considerable interest in the improved low tension magneto, as well as the high tension device, and he attempted to develop it in England, yet the evidence as a whole is overwhelming that he was not the inventor, and that Kane was. The evidence is thoroughly satisfactory."

Review of Testimony Establishing Kane's Inventorship.

The record abundantly supports Judge Sanborn's findings. In the spring of 1909 the Webster Company was located in Chicago, and in a small way was manufacturing an oscillating magneto. Its only customer was the International Harvester Company, and Plaintiff's Exhibit No. 11 is a specimen of the magnetos which were then being made. This type of equipment is illustrated generally in the Milton patent No. 1,053,107, and it consisted of a magneto proper mounted on a boss, projecting from the engine cylinder at a point considerably removed from the spark plug. The rotor or armature shaft of the magneto was connected with the shaft of the movable electrode in the spark plug by interposed link mechanism. Every witness who had any connection at that time with either the Harvester Company or the Webster Company (including Milton) testified fully about the many serious troubles that were experienced with the magnetos like Exhibit 11 (R. Vol. 1, 230, 243, 343, 513).

The superintendent of the Milwaukee works of the International Harvester Company at that time was Mr. H. A. Waterman. He made a report on March 15, 1909 (R. Vol. 2, 1), to the experimental department of the Harvester Company at Chicago, stating in detail the many prohibitive defects of the old Milton magneto, and concluding that "unless these unsatisfactory conditions are corrected, we have good reason to consider it necessary to arrange for some substitute for this magneto, for use on our engines—entirely on the ground of defects developed." The substance of this complete condemnation of the Milton magneto was communicated to the Webster Company and its president, Mr. T. K. Webster, and its effect was obvious. It meant the complete collapse

of the small and struggling Webster business unless a radical remedy could be found (R. Vol. 1, 343).

Mr. T. K. Webster, the president of the Webster Company, sought to find the remedy. He called in Mr. E. J. Kane and Mr. Gerald Chiville, who were both engineers in the employ of the Webster Company, and explained to them the serious condition of affairs, and told them to get up independently the best designs they could for a new magneto equipment. About two days later both Mr. Chiville and Mr. Kane presented their new designs, which were submitted to the other engineers of the Webster Company. Mr. Kane's design was accepted (R. Vol. 1, 243, 346, 598, 675).

Mr. Kane testified that on one of his previous trips to the Milwaukee works of the Harvester Company he had seen a copy of Mr. Waterman's report of March 15th, and at once began to speculate on some way of overcoming the defects of the magneto. Some time later Mr. Webster asked him if he could not do something to remedy the situation, and on the following day (Sunday) Mr. Kane worked out at home a rough drawing of a design, which he thought would remedy the troubles confronting the company. This drawing is in evidence as Plaintiff's Exhibit 17, and it is dated April 11, 1909, and signed E. J. Kane (R. Vol. 1, 244, 245; Vol. 2, 27).

Mr. Maurice Kane, the father of E. J. Kane, testified to his son's having made this drawing at home, as described by the son, and it was he who suggested that the son sign and date the drawing. Mr. Maurice Kane also produced his own memorandum book, in which he had written, on April 14th, 1909: "Cavanaugh: Joe has worked out a much simpler attachment of magneto to engine." Mr. Maurice Kane was the head of the experimental department of the Harvester Company, and Mr.

Cavanaugh was his assistant, this entry being made to remind Mr. Kane to call the matter to the attention of Mr. Cavanaugh (R. Vol. 1, 295-297).

Immediately following Sunday, April 11, 1909, E. J. Kane, at his desk at the Webster Company, completed a second drawing showing fully all the details of the new design which he had made, and this drawing is in evidence as Plaintiff's Exhibit 18, and is signed "E. J. Kane, April 14, 1909." (R. Vol. 1, 245, 319; Vol. 2, 29.)

After Mr. Kane's new design, as represented in the drawing of April 14, 1909, had been accepted by Mr. T. K. Webster and the engineers of the Webster Company, the drawing and some rough sketches made from it were turned over to Mr. Abbott Munn, the foreman of the magneto department of the Webster Company, who proceeded at once to make up a sample equipment. Such an equipment is in evidence as Plaintiff's Exhibit No. 12 (R. Vol. 1, 246, 247, 319).

Mr. Munn testified that he saw Mr. Kane making the drawing Exhibit 18, and talked with him about it at the time. When the drawing was completed the drawing was turned over to Mr. Munn, who got the patterns made from the drawings, and got castings from the foundry, and machined up the castings and completed the magneto equipment in accordance with the Kane drawing (R. Vol. 1, 319-322).

When Mr. Cavanaugh was shown the Kane design, he was enthusiastic, and in order to facilitate its completion and test he furnished a six-horse-power engine to the Webster Company (R. Vol. 1, 244, 344, 345). As soon as Mr. Munn had completed the first specimen, like Exhibit 12, embodying the Kane design, it was tried out at the Webster factory on this Harvester Company engine which Mr. Cavanaugh had supplied. The device was a success

from the start (R. Vol. 1, 247, 319). On April 29th Mr. T. K. Webster wrote to the International Harvester Company, enclosing photographs of the Kane equipment attached to this Harvester engine, pointing out that the new equipment satisfactorily overcame all of the previous objections of Mr. Waterman (R. Vol. 1, 343, 344; Vol. 2, 25).

Mr. Maurice Kane testified from an entry in his diary that he saw this new equipment tried out at the Webster plant on May 13, 1909, and that it worked well, there being present with him Mr. Cavanaugh, Mr. Webster, Mr. Joe Kane and others (R. Vol. 1, 298, 301).

Soon after this Mr. E. J. Kane took the original specimen of the new magneto equipment, such as Plaintiff's Exhibit No. 12, to Milwaukee, and exhibited it to Mr. Waterman (R. Vol. 1, 230, 248, 299).

The new magneto overcame all of the difficulties of those like Plaintiff's Exhibit No. 11, which had been so thoroughly condemned by Mr. Waterman, and after exhaustive tests Mr. Waterman reported on June 11, 1909 (R. Vol. 2, 3), to the experimental department of the Harvester Company, that the new magneto had for some time been in operation; that it was different in all of its parts from the older magnetos; and that the alterations overcame the objections raised in his report of March 15th. As Mr. Waterman said:

"The magneto as now presented seems to work well, and except for the fact apparatus of this nature is rather delicate when continuously exposed to dust and moisture, we see no reason why it should not prove reasonably satisfactory, electrically and mechanically."

The new magneto proved so thoroughly satisfactory that the Webster Company kept the business of the Harvester Company (R. Vol. 1, 349), and by August or September,

1909, the Webster Company was manufacturing these magnetos in quantities (R. Vol. 1, 327). From that time on, the sales of the successful Kane unitary magneto ignition equipment rapidly increased, until by 1912 the Webster Company was selling 8956 equipments, and in 1918 the sales reached the amazing total of 129,785 equipments (R. Vol. 1, 474).

Mr. Kane testifies that Mr. Webster, whose time and attention was always divided between many activities (R. Vol. 1, 391), did not seem concerned about filing a patent application on the Kane magneto ignition equipment. As Mr. Webster said, he was after results, and when the new machine was approved by the Harvester Company the thing was banished from his mind (R. Vol. 1, 369). Finally Mr. Kane himself, at the instance of his father, filed an application on February 2, 1910, paying all the expenses himself (R. Vol. 1, 256). This application was filed and prosecuted by Mr. Kane's personal attorneys, and on January 14, 1915, pursuant to a requirement of the Patent Office, a divisional application was filed by Mr. Kane, which eventuated in the patent in suit. Neither Mr. Webster nor the Webster Electric Company were informed of the filing and pendency of the Kane applications (R. Vol. 1, 256).

Defendants' Contention Rests Solely on Milton's Assertion, Which Judge Sanborn Found Uncorroborated.

During the spring of 1909, when the Kane magneto equipment was invented, Mr. Milton was one of the engineers of the Webster Electric Company, and while he was taking some interest in the low-tension magneto with which this litigation deals, he was devoting most of his time and thought to a high-tension magneto which the company was then attempting to develop (R. Vol. 1, 252,

330). Defendants seek to save themselves in their piratical infringement by saying that the Webster Company has secured a patent for this invention, upon which its success it founded, in the name of Kane, when it should have obtained a patent in the name of its other employee, Milton.

Mr. Milton testified before Judge Sanborn at great length, but he was forced by the very nature of things to corroborate every fact upon which invention by Kane depends.

Mr. Milton testified that Mr. Kane made the two drawings Plaintiff's Exhibits 17 and 18 (R. Vol. 1, 532-535), and that immediately following these a sample equipment was made up in the shop, and that this was taken to Milwaukee for inspection by Mr. Waterman by E. J. Kane (R. Vol. 1, 627). Mr. Milton further agreed with the other witnesses that the new magneto equipment operated with entire satisfaction, and that following Mr. Waterman's approving report of June 11, 1909, the commercial production of the new magnetos was commenced.

The court will search Mr. Milton's testimony in vain for any testimony contrary to the fact that this new magneto was invented by Mr. Kane, except for the bald assertion by Mr. Milton that the Kane drawings of April 11 and April 14, 1909, were worked up by Kane following Milton's suggestions. There is not a single document nor a single witness in the record to corroborate Milton's mere assertion or to oppose the overwhelming evidence for Kane offered by every witness who had any connection with the subject and the irrefutable documents which they presented. Judge Sanborn held that Milton's testimony was inconsistent and that he produced "no corroboration of his claim to invention." (R. Vol. 1, 804.)

**Prior to the Declaration of the Kane-Milton Interference
No One Connected With Plaintiff, Except Milton Him-
self, Knew That He Was Not the Inventor of the Sub-
ject-Matter Claimed in the Milton Patent.**

On October 28, 1909, Milton was in Europe and on that day he filed in his own name a British patent application illustrating the new magneto equipment which the Webster Company by that time was manufacturing in commercial quantities. The claims of that British application had nothing whatever to do with the broad features of invention embodied in the new magneto, but were limited to certain mechanical details included in it. The Milton British claims were as follows:

“1. In a magneto generator, an element operating the inductor, which acts also as or carries a cam surface, whereby the ignition points are allowed suddenly to be broken, but slowly to contact, whereby undue hammering of the contacts is obviated, and which also acts or carries supports for the springs operating the inductor; substantially as described.

“2. In a magneto generator, having the feature claimed in claim 1, an arrangement whereby unnecessary hammering of the contacts is avoided, which consists in automatically throwing the inductor operator out of action when its movements are of greater frequency than correspond to the desired ignition period, except during such time as the spark is required to pass for ignition purposes.

“3. All improvements in and relating to magneto generators with reference to the accompanying drawings.”

The Kane application, which Kane personally filed on February 2, 1910, however, contained broad and sweeping claims comparable to those here in issue. Original claim 8 of the Kane application, for instance, read (R. Vol. 2, 516):

“In igniters in explosive engines, the combination

with an electric circuit, having included therein two electrodes, of means for normally holding the electrodes in contact with each other, a magnetic field, an oscillating armature located in said field, and included in said circuit, a reciprocating member controlled by the running of the engine for moving the oscillating armature in one direction, means for moving the oscillating armature in the opposite direction, means for separating the electrodes when the oscillatory armature is moved in said opposite direction, and means for timing the movement of said armature in said opposite direction."

After Mr. Milton returned from Europe the question became imminent as to whether or not a United States application should be filed by him in correspondence with the British application. Such an American application had to be filed, if at all, before October 28, 1910. The Webster Electric Company, by virtue of a contract with Milton, was licensed under any Milton patents. It had no rights at that time under the Kane application, and had no knowledge whatever that the Kane application existed (R. Vol. 1, 352, 364, 371).

Mr. Milton frequently wrote to Mr. Williams, the patent counsel of the Webster Electric Company, asking if the United States application was to be filed. Mr. Williams at that time had never heard of Kane, and knew nothing of the facts which we have reviewed above. Mr. Webster, on the other hand, while he knew those facts, had no knowledge (as he has testified at length) of any relation between the Milton British application and the invention made by Mr. Kane. There was not a person connected in any way with the Webster Electric Company who knew the facts concerning Kane's invention of the unitary magneto ignition equipment, and at the same time knew that the Milton British patent (with which the proposed United States application was to correspond) disclosed and was based on that same equipment which

Mr. Kane had invented. (R. Vol. 1, 370, 374; Vol. 2, 347-353.)

Mr. Webster finally left to Mr. Williams the decision as to whether or not the United States Milton application should be filed, and it was filed on October 28, 1910.

In the natural course, Mr. Williams' office, entirely unaware of either Kane or the Kane application, prosecuted the Milton United States application to obtain claims which they considered necessary to protect the commercial equipment of the Webster Electric Company, which Milton allowed them to believe he had invented. As a result the Milton patent No. 1,096,048 was issued on May 12, 1914.

Some time after the issuance of the Milton patent it came to the attention of Mr. Kane, who was no longer connected with the Webster Electric Company. He consulted with his attorneys, and informed them that he, not Milton, was the inventor of the most important features disclosed in the Milton patent (R. Vol. 1, 282). Accordingly, the pertinent claims of the Milton patent were copied into the Kane patent, and pursuant to a requirement of the Patent Office, were later removed from the Kane application and presented in a divisional application filed January 14, 1915, which eventuated in the patent in suit. (R. Vol. 2, 551, 624.)

The Patent Office, of course, declared an interference in August, 1915, between the Milton patent and the Kane application, counsel for the Webster Electric Company representing Milton, and Mr. Kane's personal counsel representing him. (R. Vol. 2, 362.)

Kane's Statement in the Kane-Milton Interference Is Fully Corroborated by the Record in This Case. Milton Has Entirely Abandoned the Assertions Then Made in His Statement.

In his preliminary statement Kane swore that after conceiving the invention, he made a sketch of it on April 11, 1909, and a working drawing on April 14, 1909; that he explained the invention to others about April 11, 1909; that a device embodying the invention was completed and successfully operated about May 1, 1909, and that further devices were manufactured in July and August, 1909. (R. Vol. 2, 371.)

These are precisely the same facts which Kane has stated here, and in which he is corroborated by every witness and by every material document in the case. That preliminary statement was prepared and filed by Kane's personal attorney, without the knowledge of anyone connected with the Webster Electric Company, and before the Webster Electric Company had any interest whatever in the Kane application. The drawings of April 11, and April 14, 1909, which are signed and dated by E. J. Kane, and which are now Plaintiff's Exhibits 17 and 18 (R. Vol. 2, 27, 29) in this case, were produced by Kane from his private papers in support of his preliminary statement in the Milton interference.

Milton's preliminary statement in that interference stated that he conceived the invention about August 15, 1908; that he made a drawing of it on August 15, 1908; that he explained the invention to others on August 15, 1908; and that he reduced the invention to practice on September 24, 1908 (R. Vol. 2, 379). In his testimony in the Kane interference Milton again swore to these same 1908 dates (R. Vol. 2, 468).

In the present case Milton has entirely abandoned this

fiction of invention by him in 1908. He now corroborates all of the statements made by Kane and the other witnesses as to the invention having been developed in the spring of 1909, and having found its first concrete embodiment in the drawing made by Kane on April 11, 1909 (R. Vol. 1, 534, 535). Milton and defendants now rely solely on Milton's self-serving and entirely uncorroborated assertion that while the invention was made in 1909 and first found form in Kane's drawing of April 11, 1909, nevertheless, the invention was not made by Kane, but was suggested to Kane by Milton. This entire change of position by Milton took place only after the facts had been elaborately developed during plaintiff's *prima facie* proofs and after he had discussed these proofs thoroughly with defendants' counsel prior to his taking the witness stand during the defense proofs.

Plaintiff Made Every Possible Effort to Establish Milton's Inventorship, and Purchased the Kane Application Only After the Fact of Kane's Inventorship Was Overwhelmingly Established.

The court is urgently requested to read that part of Milton's testimony extending from page 590 to page 613 of the record. From this testimony your Honors will learn that in preparation for the Kane-Milton interference (and before the Webster Company had any interest in the Kane application) counsel for Milton and the Webster Company repeatedly implored Milton to go through all of his papers and files and unearth anything and everything that might help to prove that Milton invented this structure. Milton also describes vividly two visits counsel made to him at Detroit, when counsel and Milton together made searches of the most exhaustive character for evidence in support of Milton's inventorship.

It will be learned, also, that, not content with this, Milton obtained from his former home at Louisville a trunk full of papers which were stored there, in the attempt to find something of probative value.

Mr. Milton admitted that, despite every effort, he was not able to find a single drawing or memorandum or other thing to corroborate his claim of invention. (R. Vol. 1, 597.)

In connection with the Kane-Milton interference Milton gave counsel for himself and the Webster Company the names of all of the men connected with the Webster Electric Company at the time this invention was made and said that these men would substantiate his claims (R. Vol. 1, 596). Every one of these men was interviewed, and every one of them said (as they have testified here) that Kane, not Milton, was the inventor of the unitary magneto ignition equipment.

After interviewing these men it became wholly apparent that the Webster Electric Company's equipment was not invented by its employee Milton, but by its employee Kane; and, forced by the discovery of these facts, the company purchased the Kane application for \$12,000 in April, 1916. (R. Vol. 1, 217, 372.) It was then that counsel for Milton and the Webster Company first saw and obtained possession of the Kane drawings of April 11 and April 14, 1909.

Milton Now Admits the Falsity of His Statements in the Kane-Milton Interference, and Defendants Rely Wholly on His Present but Unsupported Assertions.

After finding that all of the men on whom Milton relied said that Kane, not Milton, made this invention, and after finding the conclusive drawings of April 11 and April 14, 1909, signed and dated by Kane, in his possession, there was no shred of doubt left that this inven-

tion could be validly patented only to Kane. Milton was therefore repeatedly requested by the Webster Company and its attorneys to execute a formal concession of priority to Kane so that the interference might be terminated in accordance with the facts. Despite a complete disclosure to him of all of the facts and drawings which counsel had found, Milton still clung to the fiction of his own inventorship and refused to concede priority (R. Vol. 1, 590-613; Vol. 2, 131). There was only one alternative left and that was to take testimony on behalf of both parties and allow the Patent Office to decide the matter. This was done and Milton still clung to his fiction, but the interference terminated with a judgment of priority in favor of Kane (R. Vol. 2, 482).

In the present case Milton testified exhaustively, and, as we have pointed out, he entirely abandoned his former contention that he himself invented this subject-matter in 1908, and admitted that the invention was made in the spring of 1909 (R. Vol. 1, 532, 651-656). He admitted that Kane made the drawings of April 11 and April 14, 1909 (R. Vol. 1, 534), and he admitted every other material fact regarding the development of the invention in issue. His only disagreement with the other witnesses in the case is his contention that Kane developed this invention and made these drawings under Milton's directions. Milton has not produced a single document in support of his contention, and he was forced to admit that the drawings and data which were undiscovered by him at the time of the interference and on which he bases his entire change of position from invention by him in August, 1908, to suggestion to Kane in April, 1909, do not disclose nor relate to the subject-matter in issue (R. Vol. 1, 592, 593, 654).

Judge Sanborn's Opinion of Milton's Testimony.

Defendants in their brief in the Court of Appeals admitted that "Mr. Milton did not make a good witness." He certainly did not for defendants' purposes. Judge Sanborn concluded (R. Vol. 1, 803) that:

"Milton's testimony that the drawings were made under his direction is not corroborated, except by slight circumstances unsatisfactory in their character, and is inconsistent with his testimony and conduct in the Kane-Milton interference proceedings in the Patent Office. In those proceedings he put the date of his disclosure in August, 1908. On this trial he adopted Kane's date. He took very little interest in the interference proceedings, but refused to concede priority to Kane. His American patent was owned by plaintiff, so he had no interest in showing priority, except the pride of an inventor. He produced no drawings showing his alleged discovery other than those in the English patent made in October, 1909; no original drawings whatsoever, nor corroboration of his claim to invention."

Defendants' argument, therefore, is entirely untenable unless the court ignores the documentary proof and assumes that all of the witnesses, except Milton, are incredible, and that he alone is credible.

Milton Has Proved Himself Wholly Incredible.

Mr. Milton, however, has shown himself to be entirely unworthy of belief. As we have previously shown, he originally stated in his preliminary statement in the Kane-Milton interference that he conceived and made drawings of and reduced the invention in issue to practice in 1908 (R. Vol. 2, 379), and he repeated those assertions in his interference testimony (R. Vol. 2, 468). At this trial, however, after hearing all of the other witnesses and conferring with defendants' attorneys, he

pretends to remember that the invention was not made until 1909, and that although Kane made the drawings and did the development work, he did so under Milton's instructions (R. Vol. 1, 652, 653). What an easy way to turn all the testimony in the case in favor of Milton and the defendants! But there is not a single document nor another witness to support Milton's pretention!

Mr. Milton tried to give the impression that he was here to right some wrong that the Webster Electric Company had put upon his pride of inventorship, and that the time when he discovered the necessity of righting this wrong was at an interview with defendants' counsel in December, 1918—just prior to the trial of this case (R. Vol. 1, 574, 586). On cross-examination, however, he was obliged to admit that all of these facts and these drawings had been presented to him by counsel for the Webster Electric Company in 1916, and that he had been urged for months to prepare himself to testify in the Kane-Milton interference after he was familiar with the testimony then offered on behalf of Kane (R. Vol. 1, 590-613).

At another point Mr. Milton testified that he did not know until later that plaintiff had bought the Kane application, and he implied that he had been injured because he didn't know the interests of both parties in the Kane interference were owned by the Webster Electric Company (R. Vol. 1, 669, 672). But he had to admit the receipt of a letter from the Webster Electric Company's counsel in September, 1916, asking him to concede priority to Kane for the benefit of the Webster Company (R. Vol. 1, 611, 672).

Mr. Milton also insisted that plaintiff's counsel told him during the Kane interference that the Webster Company bought Kane's application because it was cheaper to buy it than to fight it (R. Vol. 1, 609), but right on

top of that he was forced to acknowledge receiving a letter in September, 1916, in which he was told that the Kane application was purchased because investigation demonstrated that the Kane patent would be sustained and the Milton patent would not (R. Vol. 1, 611).

Mr. Milton also insisted, because it fitted in better with the fiction he was trying to establish, that these new magneto equipments had been built in considerable quantities and delivered to the International Harvester Company in May, 1909 (R. Vol. 1, 622, 623). But the letters of the Harvester Company show, as the other witnesses have testified, that those deliveries did not begin until August or September, 1909 (R. Vol. 2, 4, 7, 8, 9; Vol. 1, 624-632), and that the tests of the preliminary machine had not been completed until June 11, 1909 (R. Vol. 2, 3).

We submit that the uncorroborated statements of a man of the character of Mr. Milton shows himself to be cannot override the testimony of many other witnesses corroborated in every detail by unimpeachable documents.

The Chiville Letter, Which Milton Attempted to Conceal, Conclusively Refutes Milton's Assertions, on Which Defendants Rely.

Judge Sanborn saw and listened to Mr. Milton for several days, and he also heard the extended testimony of J. A. Munn, A. C. Kleckner, Ernest Bruce, E. J. Kane, Maurice Kane and T. K. Webster. These are the men who, at the time of the Kane-Milton interference, Milton said would support his claim of inventorship. Everyone of them testified in the interference and has testified before Judge Sanborn that Kane, not Milton, invented the unitary magneto ignition equipment.

One other man, G. D. Chiville, was more closely asso-

ciated with this matter than any one except Kane himself. Mr. Chiville could not be located, so that he was not available as a witness for either party at the time of the trial, but his testimony dramatically appeared in the form of a personal letter to Milton.

Mr. Milton testified (R. Vol. 1, 603):

"X-Q. Didn't he (counsel for the Webster Company) tell you, or didn't some of us tell you, if you don't remember who it was, that Chiville said it was Kane who brought down for the first time and showed for the first time this design?

"A. I don't recall it that way at all.

"X-Q. Did not you get the idea from any of us that Chiville, instead of corroborating you as you had said that he probably would, corroborated what we told you Kane would testify to; didn't you learn that at that time?

"A. I learned at some time during this period that Chiville would make a statement that he thought that Kane designed that."

Subsequent to this testimony and just before Milton left the stand, counsel for plaintiff were given permission to look through the voluminous papers which Mr. Milton had with him at the trial, and in so doing they found, hidden away from the other papers, a letter from Chiville to Milton (Plaintiff's Exhibit 66, R. Vol. 2, 121), which is reprinted in Milton's testimony concerning it at page 675 of Volume 1 of the record. Mr. Milton admitted that he had this letter in his possession and had just received it when counsel for Milton and the Webster Company was interviewing him at Detroit on May 8, 1916, in the attempt to find something in support of Milton's claim, but that he did not say anything to his counsel about it (R. Vol. 1, 675, 676). That letter reads as follows:

"CHICAGO, ILLINOIS, May 5, 1916.

"Dear John:

"Mr. Robert M. See, of Williams, Bradbury &

See, has asked me to sign an affidavit concerning my recollection of the originating of the idea of mounting a low tension magneto of the ignition plug casting. Also of the tripping of movable electrode by inductor shaft yoke.

"All that I can recall now is Mr. T. K. Webster asked Kane and me to design the most compact and simple outfit we could. We worked out our ideas separately and Kane's design was accepted and used.

"If an affidavit of the above will work against your interests in any way, I will try to get out of signing one. I have said I would sign one, and then I thought it might affect your interests, so I wrote to find out.

"Mr. See says he is to see you in Detroit Monday. Please keep this letter to yourself.

"We are all well and hope your are too. Give our best regards to Mrs. Milton and the little girl. Answer this letter right away please.

"Yours very truly,

"GERALD D. CHIVILLE."

This is precisely the way in which the record indubitably proves that this invention came into being. Milton never told counsel during the interference of the existence of this letter, and never produced it at the trial of this case, until it was found and he was confronted with it by plaintiff's counsel. There is no doubt whatever that Milton suppressed it because he knew, as Chiville suggested to him, that the facts stated by Chiville "will work against your interests." This evidence which Milton attempted to suppress absolutely agrees with the testimony previously given by Mr. Webster and Mr. Kane and others, and completely negatives Milton's fiction on which defendants rely.

When the court recalls the painstaking and exhaustive attempt of the Webster Electric Company and its counsel to establish Milton's inventorship and the validity of his patent for which it had almost completed payment,

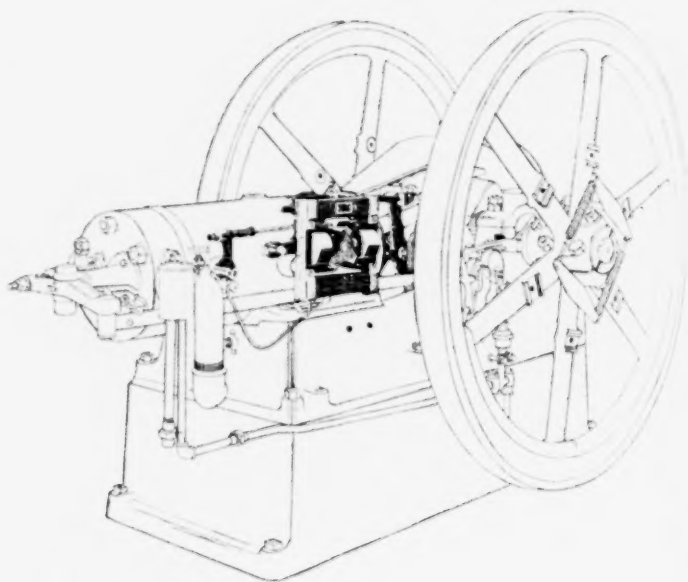
and recalls also that it was not until after this attempt had wholly failed that the Webster Electric Company purchased the Kane application, the court may well say with the Second Circuit Court of Appeals in *Proctor & Gamble Company v. Berlin Mills Company*, 256 Fed., 23:

“It is a strain upon credulity to believe that when this plaintiff corporation might just as well have advanced an application in Kayser’s name, it deliberately preferred the fraud of prosecuting it in that of Burchenal.”

We think this court undoubtedly will conclude with Judge Sanborn that “the evidence as a whole is overwhelming that Milton was not the inventor and that Kane was,” and that “the evidence is thoroughly satisfactory.”

PLAINTIFF'S EXHIBIT 13.

Plaintiff's Exhibit 13 is a circular, published by the International Harvester Company of America, and describes and illustrates the *non-unitary* Milton device which was superseded by the Kane invention (R. Vol. 1, 241, 242).



PLAINTIFF'S EXHIBIT 24.

This (physical) exhibit is a booklet put out by the Sumter Electrical Company in 1911 (R. Vol. 1, p. 400). On page 47 of this exhibit is illustrated the *non-unitary* type of oscillating equipment which the Sumter Company made at that time. Page 47 of the exhibit is reproduced below.

IGNITION HANDBOOK.

47

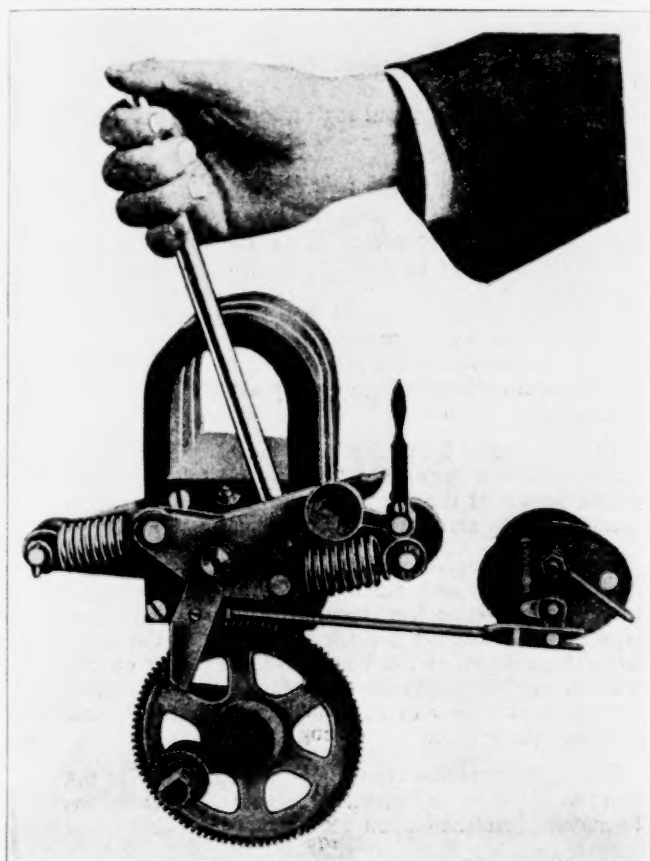


FIG. 18—SETTING 3-M OSCILLATOR BY HAND TO PRODUCE SPARK WITHOUT TURNING ENGINE.

PLAINTIFF'S EXHIBITS 25, 26, 28 and 32.

These (physical) exhibits are booklets and leaflets put out by the Sumter Electrical Company in 1913 and 1914 (R. Vol. 1, pp. 400-401). They illustrate the systematic attack which the Sumter Company, during 1913 and 1914, made on the Webster Company's type of equipment—the equipment which the Sumter Company pirated in 1915.

Page 43—Exhibit 25.**MAGNETO HANDBOOK**

43

on the igniter points; and such a machine we are prepared to furnish.

TRACTOR TYPES: We furnish magnetos specially adapted for tractors.

OSCILLATING MAGNETOS: We furnish a full line of this type, formerly so popular, but wish to state that owing to the high efficiency of our *Standard Rotary Types*, and the fact that we can meet every requirement with the rotary machine, the oscillators are no longer necessary, nor are they desirable, owing to certain inherent disadvantages not possessed by rotary machines.

Fig 18 shows front and side views of our single spring oscillator type "BV," a very popular machine, possessing all of the Sumter features, and including a special bearing arrangement, special lubricators, etc.

We can accomplish starting from a standstill with a rotary magneto, and fulfill any other conditions for which an oscillator has heretofore been considered necessary. While we furnish a machine of the oscillating type, equal if not superior to anything on the market, we suggest that manufacturers correspond with us with a view to adopting the more simple and efficient rotary type.

DIMENSIONS of the type "BV" are substantially the same as the type "B" given on page 45. Detailed information furnished upon request

Page 35—Exhibit 26.

MAGNETO HANDBOOK

35

not possessed by the standard types. The magneto used on an oil engine, where water is injected into the cylinder, must produce an igniting spark of such a quality that it will not be affected by water lodging on the igniter points; and such a machine we are prepared to furnish.

TRACTOR TYPES: We furnish magnetos specially adapted for tractors.

OSCILLATING MAGNETOS: We furnish a full line of this type, formerly so popular; but wish to state that owing to the high efficiency of our STANDARD ROTARY TYPES, and the fact that we can meet *every requirement* with a rotary machine, the oscillators are no longer so desirable, as they have certain inherent disadvantages not possessed by rotary machines.

We will be pleased to correspond with manufacturers now using oscillators who desire to change to the more simple and efficient rotary type.

We can accomplish starting from a standstill with a rotary magneto, and fulfill any other conditions for which an oscillator has heretofore been considered necessary. We do not recommend oscillators, and while we furnish a machine of this type, equal, if not superior, to anything on the market, we do not recommend same.

Page 6—Exhibit 28.

SPECIAL LOW-TENSION MAGNETOS

In addition to the types JR, B, and AP, we furnish a type AG machine, similar in dimensions to the type AP, but with extra large magnets, making it suitable for very large, slow-moving engines.

We also build special machines to meet certain requirements met in engines using heavy fuel oils.

OSCILLATING AND SELF-STARTING MAGNETOS

We formerly furnished a full line of oscillating Magnetos, but wish to state that, owing to the high efficiency of our standard rotary types, and the fact that we can meet every requirement with the rotary machine, oscillators are no longer necessary, nor desirable, owing to certain inherent disadvantages.

Among these disadvantages may be mentioned the use of spiral springs. As every mechanic knows, it is impossible to operate a spring of this type continuously without breakage. Other defects are high voltage, the difficulty in keeping the timing in proper adjustment, and in taking care of the advance and retard. The necessary drive is complicated and expensive.

As to the self-starting feature, some time ago we developed the self-starting Magneto, wherein the trip lever was locked back against the tension of the springs and then fired by releasing same. We patented this feature, and some of the machines now offered, for which claims of novelty are being made, we consider infringements of this patent. We did not offer a machine of this type to our customers, because we considered it inherently defective, and although we manufactured same, and it proved more satisfactory than any similar machine on the market, we could foresee where it would not give the same uninterrupted service as the standard rotary types for the life of the engine.

EASY STARTING

A few minutes' consideration will show that it is necessary to turn the engine over to get compression to start. Now we can demonstrate that a Sumter rotary Magneto will start practically any engine that can be so turned

over—except possibly a few of the sizes between those that are hand- and air-started. Therefore the "self-starting" Magneto possesses no advantage, as it is necessary to turn the engine to get compression. Any engine that is turned over by hand at the rate of eighteen or twenty revolutions per minute, or that is air-started, can be started with a Sumter rotary Magneto. We do not mean that you must turn the engine over eighteen or twenty times; but if, when the igniter snaps, the engine is moving *at the rate of* eighteen or twenty revolutions per minute, a good igniting spark will be produced.

Some of our customers employ a starting feature wherein the engine is rocked back against compression, in which case a quarter of a turn of the flywheel is sufficient to start.

This high starting efficiency of Sumter rotary Magnetos should be considered when comparing them with other types. It is true there are many Magnetos that will run an engine after it is once started, but these machines lack efficiency at slow speeds. They must be speeded up to produce an igniting spark. These high-speed machines are subject to mechanical trouble, worn bearings, etc.

OUTPUT

We call attention to the fact that the current from an alternating Magneto cannot be satisfactorily measured with the ordinary measuring instruments. We will be glad to furnish those interested, specifications for making tests of the Sumter Magneto in comparison with any other, and will outline the conditions by which the customer can make accurate comparisons. The electrical output of Sumter machines is so proportioned that the spark has certain qualities that prevent the igniter points from being pitted or eaten away, and the igniters will run for days and even months without requiring any of the attention or adjustment which must be given them when batteries are used.

Many of our customers report a marked saving in fuel consumption when Sumter Magnetos are used. This is reasonable, as the hot, vigorous spark rapidly ignites the mixture, a point which should not be overlooked when comparing the Sumter machines with others.

Many customers report an increase in horsepower. On a twelve-horsepower engine tested at the University of Oklahoma, it was found that, with the Magneto the engine developed fourteen-horsepower on brake test, as against 11.2 with battery ignition.

Page 3—Exhibit 32.

Unlike the oscillating Magnetos, the Sumter is gear-driven, and therefore there are no springs to break, trip levers to work loose, or other parts to give mechanical troubles. Many of the manufacturers tested Sumter Magnetos in comparison with others for over two years before adopting them. The dealer should specify Sumter Magnetos, because they are especially made for stationary engines, in a factory that makes Magnetos for stationary engines only. This is an

PLAINTIFF'S EXHIBIT 41.

This (physical) exhibit is a booklet put out by the Sumter Electrical Company in 1915 after it abandoned its effort to stem the tide of the Webster Company's successful oscillating magneto and when it appropriated the inventions of the patents in suit (R. Vol. 1, p. 402). On pages 38 to 44, inclusive of this exhibit appear illustrations and descriptions of the infringing machine which the Sumter Company sold in 1915.

Exhibit 41—pages 38 to 44, inclusive.

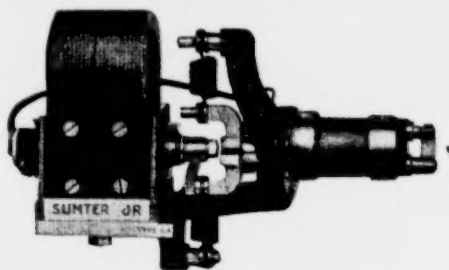


FIG. 1

TYPICAL OUTFIT. ALL MODELS HAVE HAND-STARTING ATTACHMENT, AND ADVANCE AND RETARD TIMING, WITH SAME SPARK INTENSITY OVER ENTIRE RANGE OF TIMING AND ENGINE SPEED.

One end of each spring is connected directly to the trip lever, eliminating the strain and side twist present where the springs are connected to the Magneto shaft several inches from the point of trip. This not only makes for greater simplicity, but adds considerably to the efficiency, as the trip lever is *direct acting* on the shaft of the igniter electrode, which carries a small finger having an adjusting screw, and which receives only a true radial impulse, eliminating any tendency to cause the movable electrode shaft to stick or bend or become unseated so as to permit the igniter to leak.

The engine push rod moves the trip lever against the tension of the springs, through an arc of about thirty degrees. At the proper time, the push rod slips off the trip lever, allowing same to recoil. During the recoil, a pin in the trip lever strikes the finger on the igniter shaft, causing a separation of the igniter points.

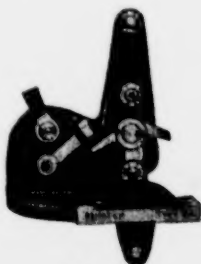


FIG. 2



FIG. 3

Fig. 2 shows working parts as a unit with the bracket, without the Magneto, it being entirely feasible to operate the engine by connecting battery to the igniter terminal.

The PLUGOSCILLATOR, being independent of the Magneto, or any springs, etc., carried thereon, different size Magnetos may be used for different sized engines. As a large number of sizes of SUMTER Standard Magnetos are available, the engine manufacturer is enabled to effect quite a saving by securing an equipment adapted to a particular engine, and does not have to invest in more Magneto than is necessary.

All wearing parts are of high carbon steel, carefully hardened. The construction permits of a large heavy bearing for the trip lever, and all thrust is taken by this bearing, supported by a heavy web in the bracket casting. In other arrangements, the thrust and wear is taken by the Magneto shaft. Our arrangement and bearings not only insure *durability*, but the number of parts are actually less, with a consequent reduction in cost.

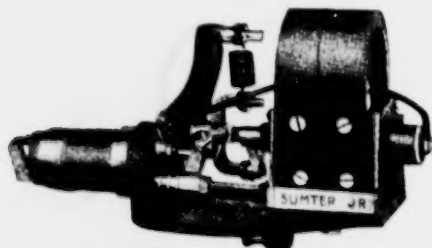


FIG. 4

IN CASE OF EMERGENCY, BATTERY MAY BE SUBSTITUTED FOR THE MAGNETO, WITH NO CHANGE, EXCEPT TO DISCONNECT WIRE FROM MAGNETO AND CONNECT TO BATTERY. REMOVING THE MAGNETO FROM THE BRACKET IN NO WAY AFFECTS THE RUNNING OF THE ENGINE. THIS "TROUBLE INSURANCE" FEATURE IS NOT FOUND IN ANY OTHER OSCILLATING ARRANGEMENT. (SEE FIG. 2, PAGE 38.)

Observe that the action of the springs is *direct* on the trip finger, the action of the trip finger *direct* on the igniter and Magneto shafts, and that all of the operating parts are closely grouped together and *definitely related*, so there is no chance for misadjustment due to wear, to be multiplied by leverage between the parts, as is the case where the igniter is a distance from the Magneto.

The igniter equipment is worthy of special mention. The movable electrode is a heavy drop forging. The insulated electrode is N. C. E. A. Standard, and can be taken out and replaced in a moment's time, without disassembling the mica insulation from around the stem. We claim this is the most efficient and durable electrode known, as it will stand a high tension spark without break-down—a test which few electrodes in make-and-break igniters will withstand.

This Interchangeable Electrode, as described on page 18, appeals strongly to the engine jobber and user, as it is as easily replaced as a spark plug, besides being soot- and leak-proof. The rivet type of contact point of meteor wire is provided in both electrodes, and is easily and cheaply renewed.

Should the bracket be removed from the engine, or the Magneto from the bracket, there is no possibility of the relation of the various parts to each other being changed. A novice can safely take off the bracket to clean the igniter, with no fear of disarranging the timing.

The PLUGOSCILLATOR enables a standard Sumter Magneto to be used as an Oscillator, thereby securing *additional efficiency at less cost.*

The SUMTER Magneto is well and favorably known, being admittedly the most extensively used Magneto in the stationary engine field.

SUMTER Magnetos are free from brush, collector, winding, and magnet trouble, and particular attention is called to the fact that the armature has a laminated, wire-wound core, and square sub-shafts riveted into bronze heads, affording the maximum current output with minimum size and weight. Comparative tests will prove this efficiency is not secured with other forms of construction.

A one-piece shaft is not employed, although cheaper, because of the loss in efficiency; and efficiency in a Magneto means *easy starting.* One-piece shafts may be necessary where the armature shaft carries the strain of the oscillating springs on one end and trip lever on the other; in other words, where the Magneto carries the operating mechanism. The PLUG-OSCILLATOR eliminates this condition.

In range, as well as current output, the Sumter Magneto excels. Wear in the engine mechanism is compensated by this range, and will not affect the spark, as occurs with short-range Magnetos.

By portable test equipment, carried by our demonstrators, we can show the current output and range of Sumter Magnetos and others. We welcome investigation.

Time, not argument, has proven the *durability* of Sumter construction. Representative makers who used them five years ago are still using them. We never saw one worn out.

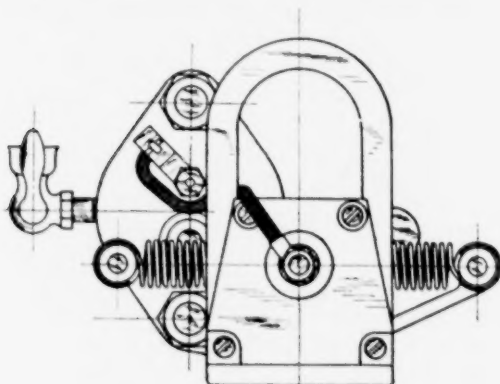


FIG. 5, TYPE CD

PLUGOSCILLATOR IS FURNISHED FOR ANY TYPE OF ENGINE, AND CAN BE MOUNTED TO OPERATE FROM PUSH ROD, SIDE SHAFT, OR, IN FACT, ANY MOVING PART OF THE ENGINE. USUALLY NO CHANGE IS REQUIRED IN THESE PARTS. ANY STANDARD SUMTER MAGNETO CAN BE USED WITH THE PLUGOSCILLATOR.

Comparison and test will prove that the PLUGOSCILLATOR is a perfected device. Like all Sumter products, it has been developed to a high state of efficiency, and has sufficient reserve power to meet the requirements of field service in the hands of the inexperienced.

The PLUGOSCILLATOR throws no undue strain on the operating parts of the engine. With some devices, it is necessary to redesign the entire operating mechanism.

In the PLUGOSCILLATOR, the strain and wear are taken by one or two inexpensive parts, carried on the bracket, and easily renewable, and not by the Magneto, which is necessarily the most expensive part of an ignition outfit.

Manufacturers using both oscillating and rotary equipment will appreciate the convenience of having only one type of Magneto to meet both requirements. Furthermore, with the PLUGOSCILLATOR, any make of rotary Magneto of standard dimensions could be used. The manufacturer is not irrevocably committed to a monopolized or special device, the manufacture of which might be discontinued, leaving the engine manufacturer with a lot of engines arranged for Magnetos no longer procurable.

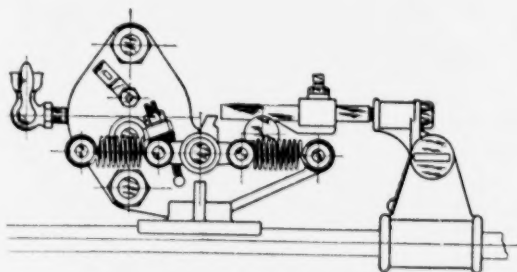


FIG. 6

TYPE CD BRACKET, SHOWING PUSH ROD MECHANISM OPERATING IGNITER, AND WITHOUT MAGNETO. NOTE HOW TRIP LEVER IS SUPPORTED ON INDEPENDENT BEARING, RELIEVING IGNITER SHAFT FROM STRAIN. WHEN MAGNETO IS ATTACHED, THERE IS NO SPRING STRAIN ON ITS BEARINGS.

The ability to secure any amount of advance or retard desired will particularly interest engine builders who desire to secure maximum efficiency and minimum fuel consumption. The spark produced, either full retard or advance, is always of maximum intensity, and this spark remains permanently efficient with the PLUGOSCILLATOR, owing to the excessive range of the Sumter Magneto used therewith, a feature not found in other Magnetos, and one worthy of the most careful consideration.

Hand firing, originally patented and introduced by Sumter, has been applied to the PLUGOSCILLATOR in a most simple and effective manner. The hand lever is mounted on the bracket, and is a part of same. It operates the mechanism same as the engine push rod, thereby producing a spark enabling the engine to be started from a standstill, provided the necessary compressed charge is in the cylinder.

The PLUGOSCILLATOR is arranged for priming cup, the opening through the igniter being so positioned as to deliver the fuel near the points. Provision is made for properly lubricating all working parts, and, as there is less side thrust, less care in this connection is necessary than with other types.

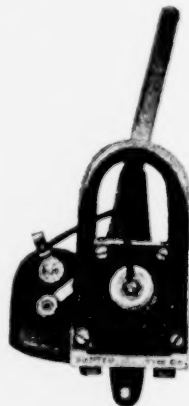


FIG. 7
END VIEW, SHOWING HAND LEVER

There is only about six inches of wire used with the PLUGOSCILLATOR, so all danger from short circuits or imperfect connections is eliminated. This wire connects the terminals on igniter and Magneto, so as to be easily disconnected at both ends when required.

As a standard Magneto is used, all well-known methods of testing same, by revolving the armature by hand in case of suspected trouble, can be applied.

With some types of Magneto, it is impossible to determine whether the Magneto is at fault or not, owing to its being so

inefficient as not to produce any noticeable current when revolved by hand, the action of the oscillating springs being necessary to produce a perceptible current.

We cannot too strongly emphasize the importance of range when considering a Magneto. Some have only seven to ten degrees. The Sumter, being of the rotary armature type, has thirty to forty degrees effective range. This simply means that if, through wear, faulty adjustment, or for any reason, the timing of the Magneto is varied as much as ten degrees with the first-mentioned Magneto, the ignition would fail; whereas, with the Sumter, the difference in the quality of spark would be hardly noticeable.

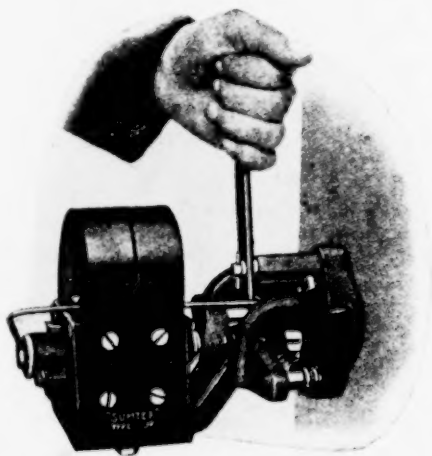


FIG. 8

HAND FIRING ATTACHMENT, WHEREBY ENGINES MAY BE
STARTED FROM A STANDSTILL

Judge Cooper's Revolutionary Decision.

UNITED STATES DISTRICT COURT,

NORTHERN DISTRICT OF NEW YORK.

| | |
|---|-------------------|
| The American Laundry Machinery Company <i>et al.</i> , | } Equity No. 417. |
| <i>vs.</i> | |
| Prosperity Company, Inc., <i>Defendant.</i> | |

CHARLES NEAVE, MAXWELL BARNES

and E. W. BROCKETT,

Attorneys for Plaintiffs,

5 Nassau Street,

New York City.

ARTHUR E. PARSON, Esq.,

Attorney for Defendant,

Syracuse, N. Y.

COOPER, J.

Motion is made to dismiss the Bill of Complaint on the ground that:

"It does not appear from any allegations in the (amended) Bill of Complaint that, more than two years prior to the date of filing of the alleged divisional application No. 334,785, of the Andree patent in suit No. 1,379,601, the alleged inventions of said patent (a) were not in public use or on sale in this country (b) were not patented or described in any printed publication in this or any foreign country."

The complaint makes the proper and usual averments in these respects, so far as the prior or parent patent is concerned, and the sole question here involved is as to the necessity of repeating these allegations as to the divisional application.

By a recent decision the Supreme Court has held the two year limitation for the filing of applications (Revised Statutes, Sec. 4886) applies to a divisional, as well as an original application.

Chapman v. Wintroath, 252 U. S., 126, 135.

The following recent authorities have held that the effect of the decision in the Chapman case (*supra*) is to fix the period during which divisional applications must be filed, at two years from the date of issuances of a prior patent.

Splitdorf Electrical Co. v. Webster Electrical Co.,
283 Fed., 83, 93.

Wahl v. Main, 280 Fed., 974.

Ex parte Nathan, 279 Fed., 925.

DeFerranti v. Harmatta, 273 Fed., 357.

Ransdell v. Johns, 273 Fed., 365.

Replogle v. Kirby, 269 Fed., 862.

Wills v. Honigmann, 267 Fed., 743.

The plaintiff concedes that if the two year rule applies to the divisional application, the bill is defective in not making the appropriate averments.

In view of the foregoing, the motion to dismiss must be granted, with leave to amend.

Judge Cooper Reversed.

UNITED STATES CIRCUIT COURT OF APPEALS

FOR THE SECOND CIRCUIT.

Before:

HON. CHARLES M. HOUGH,

HON. MARTIN T. MANTON,

HON. JULIUS M. MAYER,

Circuit Judges.

American Laundry Machinery Com-
pany and Metropolitan Trust Com-
pany of the City of New York.

Plaintiffs-appellants;

vs.

Prosperity Company, Inc.,

Defendant-appellee.

Appeal from final de-
cree in equity entered
in the District Court
for the Northern Dis-
trict of New York.

Plaintiffs brought the usual patent bill on No. 1,379,601 and another patent.

In respect of the above numbered patent the bill states in usual form that the patentee, being

“the first, etc. inventor of certain improvements not known or used by others in this country before his invention . . . and not patented or described in any printed publications in this or any foreign country before his invention thereof for more than two years prior to his application . . . and not in public use or on sale in this country for more than two years prior to (said) date of application . . . and not patented . . . on an application filed more than twelve months prior to his said application,”—

did on June 7, 1916, file in the Patent Office an application for Letters Patent.

It is then pleaded that

“While the said application aforesaid was pending in full force and effect, said invention never having

been abandoned, it was duly divided and a divisional application for the said invention”

was duly filed by the patentee on October 31, 1919; which divisional application ripened into the patent in suit on May 24, 1921.

This bill was met by a motion to dismiss because

“It does not appear from any allegations in the bill of complaint that, more than two years prior to the date of filing of the alleged divisional application . . . the alleged inventions of said patent (a) were not in public use or on sale in this country, and (b) were not patented or described in any printed publication in this or any foreign country.”

This motion the District Court granted and dismissed the bill. Plaintiffs appealed.*

CHARLES NEAVE for plaintiffs-appellants;

ARTHUR E. PARSONS and ALBERT F. NATHAN for defendant-appellee.

HOUGH, C. J.

The matter at bar is interesting and not unimportant; for if the order appealed from be well founded, its effect is to render a familiar portion of patent office practice extremely dangerous for those acquiescing therein, yet such danger is said to be created by a decision of the Supreme Court;—*Chapman vs. Wintroath*, 252 U. S., 126.

Under what the cited decision calls “the statute which is fundamental to all others in our patent law,” (R. S. 4886) patents are granted to those inventing new and useful arts which (*inter alia*) were not in public use, and not patented or described for more than two years “prior

* The form of the order appealed from is open to criticism, and it is not overlooked that the order as entered affects only one patent. But as these technical difficulties might have been overcome in the court below and neither party has referred to them on this hearing, we pass them by, without by silence approving the practice.

to his (the petitioning inventor's) application." Under this act it is good pleading for plaintiff in a patent suit, to negative the exceptions of the statute in his bill; and this the present plaintiff did, as shown above.

It being "difficult, perhaps impossible" to lay down general rules determining when improvements should be embraced in "one, two or more" patents, discretion must be left to the Patent Office on this "nice and perplexing question." (*Bennet vs. Fowler*, 8 Wall. 445 at 448.) Accordingly the office has for many years made rules on what are too well known as "divisional applications" to need explanation; but the statutes may be searched in vain for anything about division.

The sense of the rules is that if a single application claims "several inventions," and the "independence of the inventions" be clear, the division will be insisted on "before any action on the merits"; but otherwise at any time during the pendency of the application. That is, division may be, and often is, required years after application filed; and when it is required the applicant must "elect" to which invention he will limit his pending application; while the other inventions "may be made the subject of separate applications". (Rule 42). If the applicant does not agree with the ruling requiring division, he may appeal, and thereby probably delay obtaining any patent; but no applicant can justly be blamed for acquiescing in a command by lawful authority; much less can he properly be made to suffer loss by obedience.

The patent at bar was divided, and the applicant elected to prosecute that part of his invention now represented by the patent in suit, in a "separate application," *i. e.*, a "divisional" one. The matter is so pleaded; and from the bill the necessary legal inference is that everything material, both in specification and claims of

the divisional application was fully contained in the application originally filed. There is nothing of laches, estoppel, abandonment or intervening rights suggested in this case. The solicitation of the patent ran smoothly for all we know, except for a difference of opinion between solicitor and examiner, as to how *many* patents the original disclosure justified.

The defendant has not answered, the facts at present stand as above set forth, but by motion equivalent to a general demurrer, it is asserted and has been held by the court below, that plaintiff must here allege (and subsequently prove) that the invention of this divisional application, was not patented, described, in public use nor on sale for more than two years prior to October 31, 1919.

In other words, and in this case, the inventor might have made, used in public and sold his invention on the day after he filed his application on June 7, 1916; and then because he acquiesced in a divisional ruling in 1919, invalidated *in limine* whatever be requested by the "separate" application provided for by the rule and known to the profession long before the present code of patent practice. And this is said to be the peremptory rule of the Chapman case *supra*. We feel assured that no such rule exists.

First. There is no intent shown by that decision to overrule earlier cases dealing with divisional applications in no "hostile spirit." Some are cited with approval at page 137 of the report. Divisional and renewed applications (absent intervening rights) should logically be treated alike;—see *Godfrey vs. Eames*, 1 Wall. 317; *Smith vs. Goodyear*, 93 U. S., 486.

Second. The decisions in this and other circuits distinctly holding the contrary of the rule asserted, were not overruled or adverted to; *Victor Co. vs. American*

McC. Co., 145 Fed., 350; *General McC. Co. vs. Continental McC. Co.*, 256 Fed., 660; *Rosenwasser vs. B. E. Mfg. Co.*, 264 Fed., 114. Some of these cases treat of renewed applications;—however they show the analogy; but we might rest decision, so far as we are concerned, on the last citation. It cannot be thought that the Court intended to upset without comment the whole current of authority; something so firmly established that it had long passed unchallenged into textbooks.

Third. The Chapman case, in our opinion, did not decide, nor touch upon the point at bar. As may be seen by examining the record of that litigation, it began with an examiner's ruling that Chapman was guilty of laches in not basing *any* claim on a disclosure he had made in a pending application, until some twenty months after Wintroath had obtained a patent for the same invention.

It is this theory of laches that underlies and in truth constitutes the decision in Chapman's case. The result is that Chapman was finally held not guilty of laches in taking (for interference with Wintroath) the latter's claim, and annexing the same to his specification, more than one year, *i. e.* twenty months after Wintroath obtained a patent. Delay, inaction or laches were measured by the two year space of R. S. 4886 and other sections of the patent law and not by R. S. 4894, as the lower court had ruled in *Rowntree vs. Sloan* 45 App. D. C. 207. But it must be borne in mind that this is reasoning merely from analogy; it is judge-made law as distinguished from statute law,—the statute is silent. Furthermore it asserts agreement in result with the Patent Office ruling of long standing, which *Rowntree vs. Sloan supra* had upset.

The court below has stated appellee's position by the assertion, that the Chapman case "has held that the two year limitation for the filing of applications (R. S. 4886)

applied to a divisional as well as an original application." As thus stated, no such ruling can be found in the Supreme Court's opinion; and no justification for it can be found in the statutory language. But it is evidently possible to assert the highest court as holding that where no claim was made in the original specification, a divisional application making a claim already appropriated in substance by an issued patent, must be filed within two years of the publication of that patent. The reporter perhaps so understood the court (see first paragraph of syllabus), and the Seventh Circuit seems to have accepted that view. (*Splitdorf & Co. vs. Webster*, 283 Fed., 83, at p. 93).

We think this an erroneous reading. There is no reason for any such special rule as to divisional applications; on reason the objection to belated appropriations in interference or otherwise of claims of published patents, is just as valid when the appropriator is an original applicant whose application is incapable of division. What the Office and all the courts were considering in the Chapman case, was the evil of applicants who had not claimed, watching the published art, and demanding interference with men whose patents quite likely suggested to them what they might have done. Such men can only be disciplined under existing statutes, by somewhat drastic imputations of laches, or establishing estoppels; and the Chapman decision has we think been so understood by the very court whose endeavors at discipline the Supreme Court found too drastic. For example, *Re Nathan*, 279, Fed., 925, pointing out that "no excuse is offered" by the divisional applicant for not filing within two years of issue of intervening patent. If the rule were not of assumed or imputed laches, but of statutory firmness, why refer to excuses? Also, see *Ransdell vs. Johns*, 273 Fed., 365, where no division of

application was made, and (semble) none was possible, but the doctrine of Chapman's case was applicable.

We thus find no compulsion to depart from the obviously equitable rule certainly long settled in this circuit, and we still think in the Supreme Court also, that in the absence of laches, estoppel or intervening rights, a divisional application relates back to the original from which it was carved, and will be regarded as having the filing date and priorities of that original. The ordinary difficulty with divided, renewed and sometimes even amended applications, is that they are efforts to validate something that was not carved out of anything but second thoughts, and cannot be called amendments of any original. This case is wholly free from such objections.

Decree reversed with costs, and cause remanded for further proceedings not inconsistent with this opinion.

Office Supreme Court, U. S.

FILED

FEB 26 1934

W. H. STANBURY

CLERK

IN THE
SUPREME COURT OF THE UNITED STATES

No. 93

OCTOBER TERM, 1923

WEBSTER ELECTRIC COMPANY,
PLAINTIFF-PETITIONER,

vs.

SPLITDORF ELECTRICAL COMPANY,
DEFENDANT-RESPONDENT,

BRIEF IN BEHALF OF DEFENDANT-RESPONDENT

CHARLES L. STURTEVANT,
EUGENE G. MASON,
DAVID B. GANN,
BALLARD MOORE,

For Defendant-Respondent.

CONTENTS

| | PAGE |
|--|------|
| CHAPTER I.—Statement of the Case..... | 2 |
| CHAPTER II.—Certiorari Granted on Misrepresentation as to Court of Appeals Decision..... | 5 |
| CHAPTER III.—Proceedings Leading to Grant of Patent in Suit | 11 |
| CHAPTER IV.—The Kane Patent and Kane-Milton Interference: | |
| The Kane patent, issued September 24, 1918, nearly three years after the bill of complaint in the present case was filed (October 12, 1915) and brought into the case by a supplemental bill filed October 25, 1918..... | 16 |
| The Milton patent, covering the same invention, under which and the invention covered by it plaintiff had been operating for some nine years prior to the issue of the Kane patent, marking its magnetos with the date of the Milton patent, asserting the patent against infringers, and advertising its magnetos as the "Milton Magneto".. | 16 |
| The interference declared August 17, 1915, between the Milton patent and the then pending Kane application | 16 |
| Plaintiff's acquisition of the Kane application and its subsequent control of both sides of the interference | 17 |
| Its interest in procuring a patent, on Kane's application, for the same invention previously patented to it in the Milton patent—the prolongation of the monopoly, and the extension of its scope, to be thereby secured | 17 |

| | PAGE |
|--|------|
| The result secured—the repatenting of the invention to plaintiff, in a patent granted to it on Kane's application, four years after the date of the Milton patent, with all of the claims of the Milton patent, and additional and broader claims as well | 18 |
| Review of the proceedings in the Kane-Milton interference as conducted by plaintiff's counsel representing both parties | 18 |
| The judgment in favor of Kane, and the order of the Commissioner setting aside the judgment and dissolving the interference upon discovering that plaintiff owned and controlled both sides of it | 20 |
| The petition filed by plaintiff and supported by the affidavit of its counsel, alleging that plaintiff did not own the Milton patent, and that the Milton interest in the interference was adverse to that of Kane | 20 |
| The facts in this regard as disclosed by the record, showing that plaintiff had in fact been the sole equitable owner of the Milton invention and patent for more than a year prior to the filing of such petition and affidavit, the legal title being held in trust for it by plaintiff's counsel..... | 21 |
| The order of the commissioner reinstating the interference and judgment in favor of Kane, on the strength of said petition and affidavit..... | 23 |
| Further showing of the record regarding plaintiff's ownership of the Milton patent..... | 23 |
| No presumption of priority or originality in favor of Kane, as against Milton, by reason of the judgment in the interference, conducted in manner described, and the issue of a patent to Kane as the result thereof | 25 |

CHAPTER V.—The Kane-Podlesak Interference:

| | |
|--|----|
| The effort of Kane, followed up by plaintiff after acquiring Kane's application, to also appropriate and secure to himself nine claims of the Podlesak re-issued patent under which plaintiff was licensed by the license-agreement, Exhibit D | 25 |
| These claims, copied from the Podlesak patent, first presented by Kane more than five years after the filing of his original application..... | 25 |
| No previous claims directed to the same subject matter, and extensive amendments and additions made to the specification of the application in order to lay a foundation for the new claims.... | 26 |
| The interference with the Podlesak patent and the proceedings thereon—the separate Interference Record containing such proceedings..... | 27 |
| Podlesak's motion to dissolve the interference upon the ground that Kane was barred by his laches from making the claims, and upon the further ground that they were not readable on Kane's disclosure | 27 |
| The decisions of the several Patent Office tribunals, and the final decision of the Court of Appeals for the District of Columbia (to which plaintiff carried the interference by successive appeals on behalf of Kane) to the effect that Kane was barred from making claims both because of his laches in presenting them and because they were not readable upon his disclosure | 28 |
| The conduct of plaintiff in this effort to take away from its licensors, the Podlesaks, and secure to itself nine claims of their patent under which it was licensed and whose validity it had both impliedly and expressly admitted in the license agreement, Exhibit D, and its violation of its | |

| | PAGE |
|--|------|
| covenant with the Podlesaks in said agreement to aid and assist them "in any interference proceedings relating to their rights of priority to said inventions" | 29 |
| The rejection and cancellation of the nine claims copied from the Podlesak patent, pursuant to the decision of the Court of Appeals, and the presentation and allowance of two very much broader claims addressed to the same identical subject matter (claims 7 and 8 of the Kane patent as issued) in disregard and defiance of the decision of the Court of Appeals | 30 |
| These two new claims presented by an amendment dated June 15, 1918, five years after the issue of the original Podlesak patent disclosing their subject matter, more than eight years after the filing of Kane's original application | 31 |
| The decision of the Court of Appeals of the District of Columbia in <i>Rowntree v. Sloan</i> , 227 O. G. 744, and its review by the Supreme Court of the United States in the recent case of <i>Chapman v. Wintroath</i> , 272 O. G. 913..... | 32 |
| The results of the Kane-Milton and Kane-Podlesak interferences summarized: | |
| 1. Plaintiff has secured, in a second patent, the same identical claims which it had secured four years earlier in its Milton patent, thus prolonging its monopoly under those claims by that length of time. | |
| 2. After an unsuccessful attempt to secure, for itself, in like manner, nine claims of the Podlesak patent under which it held a license, and whose validity it had both impliedly and expressly admitted, it has secured in the Kane patent two claims of very much broader scope than the claims which it sought to take away from Podlesak, which | |

| | |
|--|----|
| additional claims were introduced into Kane's application for the first time more than eight years after the filing of the application, nearly nine years after their subject matter had been disclosed in Milton's British patent, and nine years after plaintiff, operating under Milton's invention and his American application and patent, had introduced the claimed invention into extensive public use—and three years after defendants' devices, against which the claims are now directed, had been placed upon the market, and nearly that length of time after the present suit was filed..... | 33 |
|--|----|

CHAPTER VI.—Estoppel by Reason of Contractual Relation of Parties:

| | |
|--|----|
| Claims 7 and 8 of the Kane patent represent the result of an unconscionable effort on the part of plaintiff to overreach the public and its own licensors and their assigns in particular, and in view of the contractual relations existing between plaintiff and its licensors and their assigns, under the license contract, Exhibit D, it would be inequitable to permit plaintiff to assert those claims against its licensors and their assigns, even were the claims otherwise valid..... | 34 |
|--|----|

CHAPTER VII.—Kane Patent Not a True Division. Claims 7 and 8 of the Kane Patent not warranted:

| | |
|--|----|
| The subject matter of these claims, and its incomplete and imperfect, if not wholly insufficient, disclosure in Kane's original application, with no statement or intimation, in either specification or claims, that it formed any part of the invention intended to be disclosed and patented..... | 37 |
|--|----|

| | PAGE |
|---|------|
| Like insufficiency of disclosure in Kane's divisional application filed five years later..... | 39 |
| The meager and insufficient disclosure of such subject matter in the patent as finally issued, considered in connection with the drawings and specification of the patent..... | 39 |
| The amendment which was made to Kane's application nearly six years after its original filing date, as a foundation for the claims copied from the Podlesak patent and for claims 7 and 8 subsequently introduced | 42 |
| The amendment shown to have been an entire misfit, in both terms and substance, in respect to the subject matter of the claims of the Podlesak patent, as was subsequently held by the Court of Appeals of the District of Columbia..... | 45 |
| The lack of any adequate disclosure of the subject matter of claims 7 and 8 of Kane's patent in his original application and for many years later, evidence of the fact that he did not intend to claim it as any part of his invention at the time he filed his application..... | 46 |
| Kane's own testimony to the effect that he told his patent solicitor that he considered the "automatic cut-out" feature of his original application the principal part of his invention, and that he did not think there was anything patentable in the subject matter now covered by claims 7 and 8 of his patent..... | 47 |
| Plaintiff's president, Mr. Webster, also expressed the same opinion respecting such subject matter.. | 48 |

CHAPTER VIII.—Chapman v. Winthroath:

| | |
|--|----|
| The facts before the Supreme Court in the recent case of <i>Chapman v. Winthroath</i> , and their analogy to those of the case at bar..... | 49 |
|--|----|

| | PAGE |
|--|-------|
| The decision of the Supreme Court and its applica- tion to the present case..... | 54 |
| Summary of the facts of the present case in respect to the application of the decision of the Supreme Court to them..... | 55-68 |
| Railway Co. v. Sayles, 97 U. S. 554: | |
| The application of the doctrine of this familiar case to the facts of the case at bar..... | 68 |
| <i>Hobbs v. Beach</i> , 180, U. S. 383, 396—its review of <i>Railway Co. v. Sayles</i> and its application to the present case. | 70 |
| Additional authorities applying the doctrine of <i>Railway Co. v. Sayles</i> | 71 |
| Conclusion. | 74 |

CASES CITED

| | |
|---|--------|
| American Laundry Co., <i>vs.</i> Prosperity Co., Inc., (Unreported, District Court)..... | 51 |
| American Laundry Co., <i>vs.</i> Prosperity Co., Inc., (C. C. A. Decision Unreported)..... | 63 |
| Chapman <i>vs.</i> Wintroath, 252, U. S., 126, 3, 5, 6, 33, 49, 52 | |
| Con. El Light Co. <i>vs.</i> McKeesport, 40 Fed. Rep. 21, 26. | 71 |
| DeFerranti <i>vs.</i> Harmatta, 273, F. R., 357..... | 53 |
| Dunn <i>vs.</i> Savage, 30 Fed. Rep. 366, 368, 369..... | 71 |
| Ex Parte Nathan, 279 F. R., 925..... | 53, 64 |
| Electric Vacuum Cleaner Co., Inc., <i>vs.</i> Jorgensen, 290 F. R., 184..... | 60 |
| Fritts, 45 App. D. C., 211..... | 63 |
| Godfrey <i>vs.</i> Eames, 1 Wall, 317..... | 63 |
| General <i>vs.</i> Continental, 256, F. R. 660..... | 64 |
| Gilmer Co. <i>vs.</i> Geisel, 187 Fed. Rep. 606, 610..... | 71 |
| Hobbs <i>vs.</i> Beach, 180 U. S., 383 at 396..... | 70 |
| Hestonville Co. <i>vs.</i> McDuffee, 185, F. R. 798, 802.... | 71 |
| Kendall <i>vs.</i> Winsor, 21 How. 322 at 329..... | 67 |

| | PAGE |
|---|---------------|
| Kittle <i>vs.</i> Hall, 29 Fed. Rep. 508, 513..... | 71 |
| Karl Keifer Co. <i>vs.</i> Unionwerke, 218 F. R. 847, 855-6 | 72 |
| Motion Picture Patents Co. <i>vs.</i> Independent Co., 200 Fed. Rep., 411, 414, 416-17..... | 71 |
| National Elec. Co. <i>vs.</i> Telefunken Co. 209 F. R. 856, 864-5. | 72 |
| Rowntree <i>vs.</i> Sloan, 45 App. D. C., 207....28, 32, 50, 64 | |
| Replogle <i>vs.</i> Kirby, 259 F. R., 862..... | 53 |
| Ransdall <i>vs.</i> Jahns, 273 F. R., 365..... | 53, 64 |
| Rosenwasser <i>vs.</i> B. E. Mfg. Co., 264, F. R. 114..... | 64 |
| Railway Co. <i>vs.</i> Sayles, 97 U. S., 554..... | 68, 69 |
| Smith <i>vs.</i> Sprague, 123, U. S. 249..... | 52, 61 |
| Smith <i>vs.</i> Goodyear, 93 U. S., 486..... | 63 |
| Steward <i>vs.</i> American Lava Co., 215 U. S., 161..... | 71 |
| Thompson Houston Co. <i>vs.</i> Ohio Brass Co., 80 F. R., 712 at 724..... | 77 |
| United Wireless Co. <i>vs.</i> National Co., 198 F. R., 386, 395. | 71 |
| Von Recklinghausen <i>vs.</i> Dempster, 34 App. D. C., 474 | 52 |
| Victor <i>vs.</i> American, 145, F. R. 350..... | 63 |
| Victor Talking Machine Co. <i>vs.</i> Brunswick-Balke Collender Co., 290 F. R., 565 at 575..... | 75 |
| Webster Electric Co. <i>vs.</i> Splitdorf Electrical Co. et al., 255 F. R. 907 (District Court)..... | 2 |
| Webster Electric Co. <i>vs.</i> Splitdorf Electrical Co., 283 F. R., 83 (C. C. A.)..... | 2, 72 |
| Webster Electric Co. <i>vs.</i> Splitdorf Electrical Co., (On rehearing 283, F. R., 93)..... | 4, 6-9, 14-15 |
| Wells <i>vs.</i> Honigman, 267, F. R., 743..... | 53 |
| Wahl <i>vs.</i> Main, 280 F. R., 974..... | 54 |
| Woodbridge et al., <i>vs.</i> U. S. (See cases cited there- in). | 67 |

CONTENTS OF APPENDIX

| | PAGE |
|---|------|
| CHAPTER A—The Podlesak Patents: | |
| The several license agreements between the Podlesaks and plaintiff's predecessor under the Podlesak patents | 1 |
| The License Agreement, Exhibit D: | |
| This agreement analyzed and compared with license agreement, Exhibit C, and shown to have granted plaintiff's predecessor a mere nonexclusive license or shop-right under the patents covered by it | 3 |
| Defendant-appellant's acquisition of the Podlesaks' patents and of all of the Podlesaks' rights under their license agreements with plaintiff's predecessor | 6 |
| The rights which the Podlesaks retained and held under their patents and under their license agreements, Exhibit D, with plaintiff's predecessor, and their right to assign and transfer such rights to another | 9 |
| Their right to use the patented inventions themselves and to transfer that right to another with their patents <i>because they had never parted with such right</i> ; and their further right to do so because they had expressly reserved such right in their license agreement, Exhibit D, with plaintiff's predecessor, and such agreement expressly made such reserved right assignable | 12 |
| Plaintiff's sole title to any rights under the Podlesak patents is based upon an assignment of them to it by its predecessor, and the same clause and provision of the license agreement which made its predecessor's interest in and rights under the agreement assignable likewise made the Podlesak's interest in and rights under it assignable | 14 |

| | PAGE |
|---|------|
| CHAPTER B—Prior Art as to Claims 7 and 8: | |
| The Weber patent No. 820,535, considered and shown to be a substantial anticipation of claims 7 and 8 of the Kane patent | 17 |
| The Wattles patent No. 909,264, also showing a unitary plug and bracket construction | 29 |
| The abandonment, by the International Harvester Company for whose use it was gotten up, of the unitary plug and bracket construction of the Milton and Kane patents after a few years' use of it | 30 |
| CHAPTER C—Milton, Not Kane, the Real Originator of the Subject Matter of the Claims in Controversy: | |
| Review of the evidence showing that Kane's story is thoroughly discredited by the record, and that he has wholly failed to sustain the burden of proof which was upon him as the later applicant and patentee | 31 |
| CHAPTER D—The Manning-Van Deventer Letter: | |
| The letter of Mr. Manning to Mr. Van Deventer which appears to have influenced the court below unfavorably to the defendants, considered and explained in connection with the testimony of Mr. Manning and Mr. Van Deventer, and its immaterial character shown | 129 |

IN THE
SUPREME COURT OF THE UNITED STATES

OCTOBER TERM, A. D. 1923

No. 93

WEBSTER ELECTRIC COMPANY,
PLAINTIFF-PETITIONER,

vs.

SPLITDORF ELECTRICAL COMPANY,
DEFENDANT-RESPONDENT,

**BRIEF AND ARGUMENT FOR DEFENDANT-
RESPONDENT**

This case comes up on certiorari directed to the Court of Appeals of the Seventh Circuit. It involves questions of law of great importance to the Patent System of the United States, the application of the doctrine of abandonment, laches, equitable estoppel and direct estoppel to the obtaining by a party of a valid patent upon an invention more than two years after the setting up of an adverse right as asserted in an intervening patent filed between the date of filing of the parent application and the filing of the so-called divisional application. It also involves considerations of the question of estoppel based upon numerous other inequities of plaintiff in securing the patent, which will be fully pointed out in the various chapters discussing the same in the brief.

CHAPTER I.

Statement of the Case.

As originally filed, October 12, 1915, the bill of complaint in this case was based on eight patents, and the re-issue patent 13,878, February 9, 1915, the original number being 1,055,076 March 4, 1913, these being known as the *Podlesak* patents, under which the Webster Electric Company claimed rights by virtue of license from the Podlesaks, exclusive, except so far as rights to themselves, their heirs and assigns, were reserved to the Podlesaks. The reserved rights had been transferred to the Sumter Electrical Company. The bill of complaint was directed against the Podlesaks and the Splitdorf Electrical Company, as also the Sumter Electrical Company, the latter having transferred its rights to the Splitdorf Electrical Company.

On September 24, 1918, the patent of Kane, 1,280,105 (patent in suit), was issued to the Webster Electric Company.

October 25, 1918, an original bill, in the nature of a supplemental bill, was filed—bringing in that patent as a supplement to the Podlesak patents already sued on.

Answers to the original bill of complaint were filed by defendants on December 14, 1915, and to the supplemental bill, with respect to the Kane patent, on December 4, 1918. The case went to trial in the District Court for the Northern District of Illinois, and Judge Sanborn, District Judge for Wisconsin in an opinion reported in 255 Federal Reporter, page 907, dismissed the bill as to the defendants except the Splitdorf Company, but held that corporation guilty of infringement as to two of the Podlesak patents, 1,141,956, and reissue 13,878, and the Kane patent 1,280,105, issued September 24, 1918. Appeal was taken to the Court of Appeals of the Seventh Circuit, and by its decision reported in Federal Reporter 283, page 83 (Rec. Vol. I, page 835) said Court held that the rights reserved

to the Podlesaks, their heirs and assigns, to manufacture, use and sell the invention covered by the Podlesak Patents passed to the defendant, Splitdorf Company, by assignment from the Podlesaks. The bill of complaint was, therefore, dismissed as to the Podlesak patents; and as to the Kane patent, the three claims therein sued on, Nos. 3, 7 and 8, the Court of Appeals of the Seventh Circuit held claim 3 not infringed and claims 7 and 8 invalid by anticipation, on the prior art; reversing the decision of the District Court in toto.

During the pendency of the appeal, the Supreme Court of the United States rendered its decision in the Chapman-Winthroath case, recorded in 252 U. S., page 126. In the brief and argument before the Court of Appeals the defense of laches and the inequitable conduct of the plaintiff corporation—in attempting to prolong the monopoly it had already enjoyed under the Milton and Podlesak patents for many years beyond the terms of those patents, its delay in filing until adverse rights had been existent more than two years, to say nothing of the attempt, by acquiring an adverse title, to destroy the reserved property of its licensors—were dwelt upon at length. The Chapman-Winthroath case, in the language used therein apparently was decisive on one of the questions involved, namely, that of laches by failure to claim the subject matter of the invention in controversy, until more than two years had elapsed from the publication of an intervening patent i. e., the assertion of an adverse right. A public use also by the plaintiff had been going on for about six years before the filing of this divisional application upon which the Kane patent in suit was granted, and nine years before the claims sued on were filed. There had been a prior publication of a Milton British patent about six years before this divisional application was filed, and nine years before these claims were filed. There had been a three years public use by the defendant, and in fact the particular claims sued on in this case were not inserted in the divisional application *until three years after the original suit had been brought.*

The Court of Appeals, in its first decision as above referred to, did not find it necessary to consider the question of laches, or any of the inequities relied upon by defendant, for they held, as to the Kane patent, that claim 3 was not infringed, and that claims 7 and 8 were invalid in view of the prior art.

A petition for re-hearing was filed by plaintiff, in which it was expressly stated that the ruling of the court was accepted as to all matters except the holding as to the invalidity of claims 7 and 8 of the Kane patent, in view of the prior art, the language of the petition being that the re-hearing was asked—

“on the single question of the validity of claims 7 and 8 of the Kane patent 1,280,105,” Record, Vol. I., page 853, see also Record Vol. I, page 913.

The Court of Appeals of the Seventh Circuit granted the re-hearing, limiting the matter at issue to the determination of that particular question. Such re-hearing was had. In their decision on the re-hearing of the case, the court reversed the former ruling as to the anticipation of claims 7 and 8 by the prior art patents introduced by defendant, but upheld defendant's contention that said claims were invalid by reason of the inequities practiced by the plaintiff in its procurement of these claims by reason of laches, and also held that the case was controlled by the doctrine announced by this court in the Chapman-Winthroath case *supra*. The decision of the Court of Appeals on the re-hearing is reported in Federal Reporter 283, page 93. (Record Vol. I, page 918).

CHAPTER II.

Certiorari Granted on Misrepresentation as to Court of Appeals Decision.

The case is before this Court on certiorari. While it is perhaps only reasonable to assume that this court will limit its review of this case to the issues decided by the Court of Appeals on re-hearing, namely, the validity of claims 7 and 8 of the Kane patent, nevertheless, as we understand the case comes before your Honors in its entirety, it will be necessary to consider all lines of defense set up, which will necessarily lengthen the brief materially. The discussion on these points, however, may be disregarded if only the defenses based on estoppel, as to claims 7 and 8 are to be considered.

Since the *raison d'être* for the grant of the petition for certiorari was the ruling of the Court of Appeals as to the application of the Chapman-Winthroath doctrine of this court, we shall devote a chapter (VIII.) to a discussion of the Chapman-Winthroath case and its applicability to the facts set up in the present case.

It may be well to call attention at this point to the contention contained in our brief, in reply to petition for certiorari, that this case did not call for the grant of such petition. The brief filed by the petitioner was drawn in such a way as to indicate that the Court of Appeals of the Seventh Circuit had broadly taken the position that the *statutory bars* as to *public use*, *prior publication*, etc., had been held by the Supreme Court in the case of *Chapman v. Winthroath* to apply to *divisional* applications based upon, or *renewals* of, a parent case and that in such application of the doctrine said Court of Appeals has gone contrary to many decisions of this court, as well as of Circuit Courts of Appeal—giving to a divisional application the same benefits as to priority as were given to the parent

case. A careful reading of the decision of the Court of Appeals of the Seventh Circuit entirely negatives the contention made by the petitioners in this case. So far as the Court of Appeals of the Seventh Circuit referred to the Chapman-Winthroath case, they applied it in the same manner as was applied by this Court in its application of the facts in the Chapman-Winthroath case, and as it has been applied by the Court of Appeals of the District of Columbia in the cases which have been decided subsequent to that case. That is, the Court of Appeals of the Seventh Circuit held that the adverse intervening rights of other parties had accrued more than two years before the filing date of this so-called divisional application by Kane, and that the doctrine of equitable estoppel was applicable, and by analogy to the two years statute, the two years accrued adverse intervening rights became a bar. That is all that can be gleaned from the decision of the Court of Appeals of the Seventh Circuit—as to its application of the doctrine of Chapman-Winthroath in this particular case.

Furthermore, the Court of Appeals of the Seventh Circuit, as will be seen from a perusal of the decision—while holding that the Chapman-Winthroath decision was controlling as to the particular state of facts involved in this case—expressly said that it did not decide the case solely on the grounds stated in that decision, but that on the general grounds of abandonment, laches and the inequities on the part of the plaintiff corporation, said plaintiff had lost its rights to the subject-matter of the claims 7 and 8, sued on.

“But we are not required to rest our decision solely upon the two year period fixed by the statute. Laches may arise and become an effective bar to relief under a variety of circumstances. Laches is based upon delay and delay is a relative term.

“In the last paragraph of the opinion in *Chapman v. Winthroath*, we find the court referring to laches other than that defined and fixed by the statute by calling attention to the absence of any evidence in the

case under consideration that would warrant any such finding. The court says:

‘As has been pointed out, the Examiner of Interferences did not permit the introduction of any evidence with respect to laches or abandonment and the Court of Appeals rests its judgment, as he did, wholly upon the delay of the Chapmans in filing their divisional application for more than one year after the Winthroath patent was issued, as this appeared ‘on the face of the record.’ While not intending to intimate that there may not be abandonment which might bar an application within the two-year period allowed for filing, yet upon this discussion of the statutes and decisions, we cannot doubt that upon the case disclosed in this record, the Chapmans were within their legal rights in filing their divisional application at any time within two years after the publication of the Winthroath patent, and therefore the judgment of the Court of Appeals must be reversed.’

“Turning to the facts in the present case and for the moment ignoring any two-year rule, we find Kane’s position in support of claims 7 and 8 untenable. Not only did he not intend to make these claims, in fact he knowingly and intentionally failed to present them, but not until eight years after he filed his original application and more than nine years after the device was in common use, during all of which time it was in general use, did he seek to dominate the art by inserting these amended claims into the patent.

When examined as to the new combination represented by these two claims, he testified that he had knowingly failed to claim it. The following testimony appears:

“Q. What? Didn’t Mr. Webster ask you to help him out in connection with the means of fastening the magneto and the plug to the engine?

A. No, sir; he did not.

Q. He didn't discuss that at all with you prior to the time that you filed your application?

A. He did prior to the time we filed the application.

Q. Well, when was it he discussed that with you?

A. Discussed that with me when I showed him the drawing.

Q. Mr. Kane, is there anything on that drawing—the first one that you had—showing any means of regulating or determining what you call the cut-out of the spark?

A. No, sir; there is not.

* * * * *

Q. Now, what did you tell him about the means by which the magneto and plug were to be attached to the cylinder?

A. Well, outside of telling him that by doing that we had a means of securely fastening the magneto to the cylinder, and also a means of cutting out a lot of intermediate and useless mechanism, I do not know as I told him very much.

Q. You did not consider it of very much importance; is that right?

A. It seemed to me a matter more of design than importance—invention.

Q. Is that what you told him?

A. Yes, sir.

Q. And you told him that you thought that it was not an invention, and was a mere matter of design? You told that to Mr. Sprinkle, did you, when you went to him to get a patent?

A. I told him it was a good means and preferred means of fastening the magneto on the engine.

Q. Well, I asked you if you told him that you thought it was a mere matter of design, and not an invention.

A. I possibly did, yes."

"Believing that the Podlesak invention was controlled through contract and otherwise, appellee was not greatly concerned about the question of who was

the first inventor. Its attitude in the Milton-Kane contest is not such as to invite the court's confidence in the sincerity of its protestations nor in the good faith of its assertion that it was not endeavoring to improperly prolong its monopoly beyond the period fixed by statute. Having secured a favorable decision from the patent office in this interference contest through control and ownership of both sides of the litigation, it then discovered that its asserted rights under its patent and under its contract with Podlesak were challenged, and it again amended its specifications, inserting the new claims which necessitated an interference contest with Podlesak. This contest was bitterly fought, appeals being taken from the examiner and then to the patent commissioner, and then to the Court of Appeals, with the result that appellee was found guilty of laches and the decision went against it.

Appellee filed the aforementioned amended application incorporating these nine new claims, on April 17, 1915; the first three were taken from the Podlesak patent, issued March 4, 1913, and the other six from the Podlesak reissue patent, dated February 9, 1915. In this adverse decision appellee acquiesced, wherefrom it appears that if appellee was guilty of laches in April, 1915, for failure to present the nine claims under consideration, it must *a fortiori* be found guilty of laches in failing to present claims 7 and 8 until June 17, 1918. The allowance of these last two claims upon the amendment of June 17, 1918, was upon *ex parte* application and was made by the Examiner, the adverse parties, of course, not being present to protest or point out the error of such allowance. The claims differ, as heretofore stated, from the claims in the Podlesak patent, in that they are broader in scope, but the difference is not sufficient to avoid the effect of the decision in the Podlesak interference contest. They depend for their support largely, if not entirely, upon that part of the specifications which were incorporated by amendment in 1915, which amendment was made to support the nine claims taken from the Podlesak patent and subsequently rejected as heretofore described.

We conclude Kane's laches barred his right to claims 7 and 8." (Record, Vol. I., p. 918.)

A perusal of this decision will clearly bring out the misrepresentations in the petition for certiorari, for the court said that

"the precise question here presented was not squarely raised and therefore not decided in *Chapman-Winthroath*,"

then it expressed the view that

"the effect of the holding is to fix the period during which such (divisional) applications must be filed at two years from the date of the issuance of the other patent."

This is not a holding that the statutory two years bars apply to divisional cases, but an application of the doctrine of equitable estoppel.

It is, therefore, respectfully submitted that the petition for certiorari apparently was granted upon a misunderstanding of the situation.

Before taking up the full discussion of the *Chapman-Winthroath* decision, and the meaning thereof as interpreted by the Court of Appeals of the Seventh Circuit, in its application to this instant cause, it will be necessary to bring before the Court facts shown by the record as to the prosecution of the *Kane* patent in the Patent Office and the acts of plaintiff corporation with respect to said application and other applications and patents which it controlled or under which it was licensed, as showing that this case clearly comes within the doctrine of equitable estoppel intended to be held by this Court in the *Chapman-Winthroath* case.

These matters will be discussed under various headings—first, as a general statement of proceedings relating to the grant of the patent in suit (Chapter III.); a chapter relating to the *Kane* patent and the *Kane-Milton* interference (Chapter IV), and a chapter bearing on the *Kane-Podlesak* interference (Chapter V). Then a short chapter

(VI) relating to *direct* estoppel by reason of a binding clause in the license contract between the Podlesaks and the plaintiff corporation, and finally a chapter (VII.) showing that the division was not a true division and that claims 7 and 8 were unwarranted.

From the history of the case and the acts of the plaintiff corporation, it will be made to appear that there have been in the procurement of Kane's claims 7 and 8, sued on, such a violation of all equities and such laches on the part of plaintiff corporation and Kane, as makes the validity of these claims impossible under application of well settled doctrines of this court even were there no Chapman-Winthroath decision.

It will also be necessary, since the entire record is before this court, if you should hold that defendant cannot prevail on the broad principles of equity, or those governing laches, or equitable estoppel; that the bearing of the prior art on these Kane claims 7 and 8 must be considered—that your Honors may be able to decide whether the Court of Appeals was correct in its first ruling that these claims were invalid by anticipation, based on the prior art—or correct in its second ruling that they were not so anticipated. This discussion is found in Chapter B of the appendix to this brief.

It will also be necessary to take up briefly the license contract which has been referred to in the statement of the case, and this discussion will be contained in the first part of the appendix to this brief. (Chapter A.)

CHAPTER III.

Brief Statement of Proceedings Leading to the Grant of the Patent in Suit.

Kane filed his original application February 2, 1910, (Record, Vol. II., page 502) disclosing and claiming in each and all of its *twenty-four* claims an **automatic cut-out** which would render the magneto inoperative when the engine exceeded a certain speed.

The testimony shows that this is what he considered he had invented, see testimony quoted above in the decision of the Court of Appeals and found in the Record, Vol. I, pages 275 and 277, and again on page 281, where Kane said he didn't consider that there was invention in the subject-matter here involved (the bracket), and so told his attorney.

Mr. T. K. Webster, Plaintiff-Petitioner's President, and a man of long experience in patent matters, expressed the opinion that there was nothing patentable in it, pages 255, 256, 273 and 308. This application went through its usual course in the Patent Office, and was allowed on appeal to the Board of Examiners-in-Chief and finally issued November 14, 1916, No. 1,204,573 with five claims (Vol. III, page 917) on the cut-out.

On January 14, 1915, Kane filed his so-called divisional application (Vol. III, page 625)—now, after many changes, become the patent in suit, but with no claims whatsoever to the subject of present claims 7 and 8, such claims not having been introduced until June 17, 1918 (Vol. III, page 687).

The express purpose of filing the *divisional* application (Vol. III, page 637) was to institute an interference with a patent of Milton, of May 12, 1914, on which the application had been filed October 28, 1910, but on which a British Patent had been filed October 28, 1909 (Vol. II., pages 397-403) and printed and published a few weeks thereafter.

By referring to the affidavits in Exhibit 54 which is a certified copy of the file wrapper and contents of Kane's original application eventuating into patent 1,204,573, and printed in the Record, Vol. II, pages 500-621, it will be noted that, although filed with *twenty-four claims* on the automatic cut-out feature; after the various citations by the Patent Office and amendments by the applicant on February 17, 1912 (Record Vol. II, page 531) the case was restricted to two claims and reached on May 9, 1914, a con-

dition of final rejection by the Patent Office of the only two claims remaining (Record, Vol. II, page 540).

On October 22, 1914, over four years after filing date, and two years and eight months after the abandonment of all claims but those two, applicant filed amendment, copying the claims of Milton's patent, and asking for an interference (Vol. II, pages 541-549). On refusal of the examiner to enter the amendment (pages 450 and 451) he filed some months later, January 14, 1915, his divisional case, the file wrapper and contents of which is Defendant's Exhibit 55, and is found in the Record in Vol. III, pages 623-699.

Milton and Kane, the latter a subordinate of the former, who was chief engineer and expert on magneto manufacture, had both been in the employ of the Plaintiff-Petitioner corporation, and the Milton patent was owned by it and it was operating under it. The history of this interference, including the questionable way in which it was conducted, is given in the succeeding Chapter IV.

Later, viz: on April 17, 1915, (Record, Vol. III, pages 634-637) nine more claims were introduced, three like the claims of the Podlesak patent 1,055,076, of March 4, 1913, and six copied from the reissue of that patent No. 13,878, dated February 9, 1915.

These claims were at first rejected as not readable on Kane's disclosure, either original or on the divisional case (Vol. III., page 642). This rejection was repeated (page 654) and on petition to the Commissioner of Patents, the Examiner's action was affirmed (Vol. III, pages 670-673). After a further amendment by which extensive additions were made to the specification (pages 675-677) an interference with the Podlesak patent was finally declared upon the nine claims in question (pages 679-682). This interference was decided in favor of Podlesak by the Patent Office and the Court of Appeals of the District of Columbia. Its history is given in Chapter V.

Following the adverse decision of the Court of Appeals of the District of Columbia, Plaintiff-Petitioner's

counsel, Kane's attorney, filed an amendment to Kane's application on June 17, 1918 (Vol. III., pages 687), nine years after the Milton Bristish patent, and five years after the Podlesak patent, by which he introduced two new and very much broader claims than any theretofore made by Kane during the eight years his application had been pending in the Patent Office, supporting the amendment with an argument respecting the allowability of the claims, in which reference was made to an interview with the Examiner by Plaintiff's counsel and plaintiff's general manager, Mr. Brown (Vol. III., pages 687-693).

Thus, in an *ex parte* proceeding, plaintiff was able, if those claims are held valid, to override a decision of priority against him, with which he stated his complete acquiescence (Vol. III., page 690); to destroy rights which had been in existence for many years, to dominate and in effect destroy patents (Podlesak) under which he is licensed and which, in the license contract, he had agreed to protect in the following language—

"aid and assist each other in the prosecution of said applications and the obtaining of patents thereon and in any interference proceedings relating to their right of priority to said inventions, and in any suit or proceeding under any of said patents" etc. (Vol. I, page 53, second clause).

Finally, their actions, if approved, results in a prolongation of their monopoly under the Milton patent of 1914, expiring in 1931; and the Podlesak patent expiring in 1930; to September 1935.

If there is any reason in the doctrine of equitable estoppel, it can without question be applied here, and has been applied by the decision of the Court of Appeals here on review in the following language:

"Believing that the Podlesak invention was controlled through contract and otherwise, appellee was not greatly concerned about the question of who was the first inventor. Its attitude in the Milton-Kane

contest is not such as to invite the court's confidence in the sincerity of its protestations nor in the good faith of its assertion that it was not endeavoring to improperly prolong its monopoly beyond the period fixed by statute. Having secured a favorable decision from the Patent Office in this interference contest through control and ownership of both sides of the litigation, it then discovered that its asserted rights under its patent and under its contract with Podlesak were challenged, and it again amended its specifications, inserting the new claims which necessitated an interference contest with Podlesak. This contest was bitterly fought, appeals being taken from the examiner and then to the patent commissioner, and then to the Court of Appeals, with the result that appellee was found guilty of laches and the decision went against it.

Appellee filed the aforementioned amended application incorporating these nine new claims on April 17, 1915; the first three were taken from the Podlesak patent issued March 4, 1913, and the other six from the Podlesak reissue patent dated February 9, 1915. In this adverse decision appellee acquiesced, wherefrom it appears that if appellee was guilty of laches in April, 1915 for failure to present the nine claims under consideration, it must be *a fortiori* be found guilty of laches in failing to present claims 7 and 8 until June 17, 1918. The allowance of these last two claims upon the amendment of June 17, 1918, was upon *ex parte* application and was made by the Examiner, the adverse parties, of course, not being present to protest or point out the error of such allowance. The claims differ, as heretofore stated, from the claims in the Podlesak patent in that they are broader in scope, but the difference is not sufficient to avoid the effect of the decision in the Podlesak interference contest. They depend for their support largely, if not entirely, upon that part of the specifications which were incorporated by amendment in 1915, which amendment was made to support the nine claims taken from the Podlesak patent and subsequently rejected as heretofore described.

We conclude Kane's laches barred his right to claims 7 and 8." Vol. I., pp. 924-925.

CHAPTER IV.

The Kane Patent and Kane-Milton Interference.

The bill of complaint in this case was filed October 12, 1915. The Kane patent in suit was not issued until September 24, 1918. It was brought into the case by a supplemental bill filed October 25, 1918. (Vol. I., p. 184). Plaintiff's predecessor had acquired the application for the patent on April 20, 1916 (p. 217), which was also some time after the filing of the original bill.

Plaintiff's predecessor was also the owner of another patent covering the same invention, being the patent to Milton No. 1,096,048, dated May 12, 1914. (Vol. IV., p. 869.) It had been operating under that patent since the date of its issue—in fact, had paid the expenses of the preparation of the application in 1910 and its subsequent prosecution—had marked its magnetos as patented under the patent (Vol. I., p. 663), had asserted the patent against alleged infringers of it (Vol. II., p. 354), and had advertised the magnetos made under the patent as the "Milton Magneto." (Vol. II., pp. 15, 17, 25.) See also Webster Company booklet, Defendant's Exhibit No. 71, and blue print of Webster Company's working drawing of June 3, 1909, entitled "Details of Type D-2 Milton Magneto" (Defendant's Exhibit No. 21).

On August 17, 1915, this Milton patent was placed in interference with the then pending application of Kane (Vol. III., p. 643), who had filed an application based upon the same structure as Milton's, and had copied Milton's claims and introduced them into his application by amendment after the issue of the Milton patent, as hereinafter explained. (Rec., Vol. III., pp. 628-631.)

(Defendant's Exhibit 49, Record, Vol. II., pp. 360-499, contains the Patent Office record of the interference.)

Plaintiff's predecessor (hereinafter referred to as the

plaintiff for the sake of brevity), acquired the Kane application on April 20, 1916, as heretofore stated, and on the same day Kane revoked the power of attorney of the attorneys who had prepared and filed his application, and who had been conducting the interference in his behalf, and appointed plaintiff's counsel, Mr. Williams, to be his attorney in the further prosecution of his application and conduct of the interference.* Mr. Williams was already the attorney for Milton, having prepared and filed and prosecuted the application for his patent, as attorney for plaintiff and at its expense, so that when plaintiff acquired the Kane application and Mr. Williams was appointed Kane's attorney plaintiff had control of both sides of the interference.

In this situation of affairs, it was manifestly very greatly to the interest and advantage of plaintiff to secure a patent upon Kane's application, for the invention in question, if there was any basis upon which such a patent could be secured, for the reason that it would not only extend the period of the patent monopoly which it held under the Milton patent, but would afford opportunity for extending its scope as well. That is to say, a patent secured upon Kane's application would not expire for several years after the expiration of the Milton patent, and claims could be made in Kane's application not only corresponding to Milton's claims, but additional claims of broader scope if there was opportunity for them.

As the matter was worked out, in the manner hereinafter explained, the Kane patent issued on September 24, 1918, more than four years after the date of issue of the Milton patent, and contains not only all of Milton's claims, but additional claims of much broader scope than any found in the Milton patent.

The net result of the situation is that plaintiff now holds two patents for the same invention, one issued in

*The power of attorney ran to Mr. Williams and his partner, Mr. Bradbury. (Vol. II., p. 568.)

1914 and the other in 1918, the later patent containing all of the claims of the earlier patent, and additional and broader claims as well.

Referring now to the proceedings by which plaintiff secured this result, Kane's application had been filed on February 2, 1910, and Milton's on October 28, 1910, but Milton had filed an application upon his invention in Great Britain on October 28, 1909, which eventuated into British Patent 24,838 of that year. (Vol. II., 397-403). Upon the introduction of this into the interference Milton was given the benefit of the filing date of his British application (Vol. II., 405-413), and became the senior party in the interference. This occurred before plaintiff acquired Kane's application, and while the interference was being contested by really adverse interests; but before the time fixed for the taking of testimony on behalf of Kane as the junior party had expired (Vol. II., 415) plaintiff had acquired Kane's application. No proofs were introduced on behalf of either party,* as a result of which on September 6, 1916, a judgment awarding priority of invention to Milton, as the senior party, was entered by the examiner of interferences. (Vol. II., 416.)

On September 18, 1916, plaintiff's counsel stipulated with himself that this judgment "be vacated and times set for the taking of testimony and final hearing" (Vol. II., 419), and upon the filing of this stipulation in the Patent Office, on September 29, 1916, an order was entered vacating and setting aside the judgment and fixing new times for proofs and for final hearing. (Vol. II., 420.)

On October 17, 1916, plaintiff's counsel, as attorney for Kane, served notice on himself as attorney for Milton, "due and timely service" of which notice he acknowledged as attorney for Milton (Vol. II., 449), that on October 20, 1916, he would examine witnesses on behalf of Kane at

*No explanation was offered by plaintiff of its failure to introduce any proofs on behalf of Kane, the junior party. The record shows it had ample opportunity to do so after acquiring the Kane application. (Vol. II., p. 415.)

plaintiff's office at Racine, Wisconsin, pursuant to which notice the depositions of certain witnesses were taken at that time and place (Vol. II., 458-463), and duly certified by the notary before whom they were taken, the certificate containing the statement "that the opposing party was not present or represented by counsel during the taking of said testimony." (Vol. II., 463.) The witnesses appear to have been examined by Mr. McCaleb, then an assistant in the office of plaintiff's counsel, who represented both parties notwithstanding the notary's certificate to the contrary.

On October 21, 1916, plaintiff's counsel again gave notice, as attorney for Kane, to himself as attorney for Milton, "due and timely service" of which was likewise acknowledged by him as attorney for Milton (Vol. II., p. 421) that on October 23, 1916, he would examine additional witnesses on behalf of Kane at his office in Chicago.

Pursuant to this notice additional witnesses were examined at the time and place mentioned, including the applicant Kane, and Mr. Webster, president of the plaintiff company. (Vol. II., 422-443.) And in addition to the examination of these witnesses plaintiff's counsel stipulated with himself that an affidavit of one Chiville, which he had prepared some time previously, might be introduced in evidence on behalf of Kane and "used with the same force and effect as if the statements therein contained had been made in answer to interrogatories propounded by counsel." (Vol. II., 444-447).*

On January 4, 1917, after the time fixed for proofs in the interference had expired, plaintiff's counsel further stipulated with himself that Mr. Milton might be examined in his own behalf (467) and proceeded on the same day to take the deposition of Mr. Milton at the office of plaintiff's counsel in Chicago, under the circumstances stated by Mr. Milton in his testimony (Vol. II., p. 473), the examination

*This affidavit was accepted and given the full weight of testimony by the Examiner of Interferences. (See his opinion, Vol. II., pp. 481, 482.)

being conducted by Mr. McCaleb, who had examined all of the witnesses on behalf of Kane. (468-473.) The notary's certificate in this instance, as in the preceding ones, stated "that the opposing party was not present nor represented by counsel during the taking of said testimony." (474.)

The interference was submitted to the examiner of interferences on the foregoing proofs, and on March 30, 1917, he filed an opinion awarding priority of invention to Kane (478-482) and judgment in favor of Kane was entered accordingly.

On July 19, 1917, it having come to the knowledge of the Commissioner of Patents, through another interference in which Kane's application was involved (Vol. II, 660-663), that plaintiff owned both the Kane application and the Milton patent, the commissioner vacated and set aside the judgment in favor of Kane, and dissolved the interference. (486).

On August 13, 1917, plaintiff's counsel filed a petition to the commissioner on behalf of Kane and the Webster Company (488-489) praying that his order of July 19th be vacated, and supported by the affidavit of plaintiff's counsel (490-495), in which petition, among other things, it was alleged

"that now and at the time of the decision and judgment of priority by the examiner of interferences, dated March 30, 1917, the Webster Electric Company is not and was not the assignee of John Lewis Milton, one of the parties to the above entitled interference.

"that now and at the time of said decision of the Examiner of Interferences, and at the time the testimony was taken on behalf of Kane and on behalf of Milton, the whole right, title and interest in and to the Milton patent involved in the above entitled interference is and was vested in Lynn A. Williams, Trustee.

"that they (petitioners) do not own nor control the Milton patent aforesaid, and are not in a position to execute or file either a disclaimer in the matter of

said Milton patent nor a concession of priority by or for Milton and in favor of Kane.

* * * * *

“that John Lewis Milton has, and throughout the conduct of the above entitled interference has had a direct financial and pecuniary interest in his patent.”

The petition further recited that:

“The assignment records of the Patent Office show and have shown throughout the conduct of the above entitled interference who the owners of the Kane application and the Milton patent have been. * * * These assignment records show also that the Milton application theretofore owned by John Lewis Milton himself was assigned to Lynn A. Williams, Trustee, on April 10, 1912, and that the said assignment was recorded on December 13, 1915. Your petitioners show that no other assignments of the said Kane application or the said Milton patent have ever been executed or recorded and that the ownership of the said Kane application and the said Milton patent as it now exists is fully shown by the assignments of record in the Patent Office.”

The facts were, as hereinafter shown, that plaintiff had purchased the application for the Milton patent, and other inventions, from Mr. Milton in April, 1912, for the sum of twenty-five thousand dollars (\$25,000), part of which sum was paid in cash and part of which was covered by notes of plaintiff given to Milton. The Milton application was assigned to Mr. Williams as trustee, to be held by him until the notes were paid, and to be then assigned to the plaintiff. The record shows Vol. I., pp. 581, and 740) that the last of the notes was paid in June, 1916, more than a year prior to the order of the Commissioner (July 19, 1917) vacating the judgment in favor of Kane and dissolving the interference, so that from June, 1916, onward plaintiff was the full equitable owner of the Milton application and invention, although plaintiff's counsel continued to hold the legal title for it as trustee until a later date.

In the affidavit of plaintiff's counsel, filed in support of the petition and dated August 13, 1917, the purchase of the Milton application in the manner above described was set forth, and was followed by the statement (Vol. II., 492) that:

"The Webster Electric Company has not as yet completed payment of all of the said notes to Milton, and I therefore continue to hold title to the said Milton patents and applications, including the Milton patent involved in the above entitled interference. Under the terms of the trust agreement, I am bound to continue to hold such title and do still hold it. The last of the aforesaid notes does not mature until July, 1919, and unless there is some advance payment of the unmatured notes, or unless there is some default in the payment of such notes as do mature, I shall continue to hold the title to the Milton patent involved in the above entitled interference until some time in 1919.

While, therefore, the Webster Electric Company is in the process of acquiring title to the Milton patent involved in the said interference, the Webster Electric Company has not as yet acquired such title. Meanwhile John L. Milton has a beneficial interest in the said patent."

The affidavit referred (Vol. II., 493, 494) to the manner in which the proofs had been introduced in the interference for the purpose of securing a decision upon the question of priority by an impartial tribunal

"in a case in which the Webster Electric Company was interested on behalf of Kane and in which Milton was interested in his own behalf, subject only to the right of the Webster Electric Company ultimately to acquire the Milton patent, and in the event that it should complete the payment of Twenty-five Thousand Dollars, as above set forth."

The affidavit further stated that:

"All parties interested had the fullest opportunity to produce all the available evidence."

And that:

"Throughout the interference and up to the present time John L. Milton had an interest in his patent, which was and still is adverse to the interest of the Webster Electric Company in the Kane application in interference."

Upon the strength of this affidavit of plaintiff's counsel the petition was granted by the acting commissioner (the commissioner who had vacated the judgment and dissolved the interference having resigned and retired from office in the meantime) (Vol. II., 495-497), with the direction

"that the order of July 19, 1917, be vacated and the interference restored to the condition that it was prior to the entry of that order."

The showing of the record respecting the payment by plaintiff of its notes given to Milton is as follows:

On November 19, 1915, plaintiff's counsel wrote Mr. Milton a letter (Vol. I., 355, 356), in which he said:

"Mr. Brown of the Webster Electric Company has advised me, regardless of the execution of this trust agreement, that if on the first of each month hereafter you will forward not only the note which matures on that date but also the four additional notes which have the longest time to run the Webster Electric Company will pay all five of the notes. Mr. Brown was, in fact, a little surprised that you did not send him five of the notes on or about the 1st of November, and unless I hear from you to the contrary he will expect you to send him five of the notes for payment each month. If you prefer to have the Webster Electric Company authorize this I have no doubt Mr. Brown will do so if you will drop him a line."

In his acknowledgment of this letter to plaintiff's counsel Mr. Milton said (Vol. II., p. 357) :

"In your letter accompanying these papers you stated that Mr. Brown would be willing to give me a letter setting forth their willingness to pay the four extra notes each month until all of them are disposed of. If this could be done and still be agreeable to all parties, I should like to have it."

This arrangement was carried out, and on June 2, 1916, plaintiff's general manager, Mr. Brown, wrote Mr. Milton a letter (Vol. II., p. 357) in which he said :

"We paid \$1,000 of your notes yesterday and it had been our intention to request you to send the balance of them at that time, and if you will kindly do so they will be paid on presentation, and you may so advise the bank in sending them in."

Mr. Milton replied to this letter on June 7, 1916 (Vol. II., p. 357), saying :

"Upon my return to the office this morning I found your letter of the 2nd instant and have this day advised the National Bank of Kentucky to forward the notes."

Mr. Milton testified that the last of the notes was paid in June, 1916 (Vol. I., 581), and later on in the course of the trial below it was stipulated that such was the fact (Vol. I., 740).

Moreover, in a letter which Milton wrote to plaintiff's counsel on September 13, 1916, in response to a letter from plaintiff's counsel asking him to concede priority of invention to Kane (Vol. II., 131, 132, 358, 359), Milton said :

"While my title to this particular patent has passed, I am still personally interested enough in it to see that the right sort of treatment is accorded it."

This letter to counsel was written eleven months prior to the filing of the petition and affidavit by that counsel of August 13, 1917.

Plaintiff's counsel stated to the court, in the course of a personal statement which was incorporated in the transcript on this appeal at his request (Vol. I., 793), that he did not know that the notes had been paid and the ownership of the Milton patent finally acquired by plaintiff at the time he filed the petition and affidavit, in August, 1917, upon which the order vacating the judgment in the interference was set aside and the judgment restored.

The question of priority or originality, as between Kane and Milton, will be discussed in the appendix to this brief, but it will be apparent, from what has been said that plaintiff can take nothing by virtue of the decision awarding priority to Kane in an interference proceeding in which it controlled both sides and which was conducted in the manner described.

CHAPTER V.

Kane-Podlesak Interference.

In addition to securing the claims of the Milton patent, in the manner above described, Kane also sought to secure some nine claims of the Podlesak Reissued Patent No. 13,878, under which plaintiff then held and now holds a license,* to which end he introduced into this application by amendment nine claims copied from the Podlesak patent. (Vol. III., 634-637, 639). This amendment was filed in the Patent Office on April 17, 1915 (Vol. III., 634) more than five years after the filing of Kane's original application on February 2, 1910. (Vol. II., 502). Of the nine new claims introduced by the amendment, the first three were copied from Podlesak's original Patent No. 1,055,076, dated March 4, 1913, and the remaining six from the re-

*This patent is a reissue of Podlesak Patent No. 1,055,076, included in plaintiff's license Exhibit D. Vol. I, p. 53)

issue of that patent, No. 13,878, dated February 9, 1915. (Vol. III., 907).

These additional claims were at first rejected as not readable on Kane's disclosure. (Vol. III., 642.) This rejection was repeated (p. 654) after an argument had been filed by Kane's attorney, and on petition to the commissioner the examiner's action was affirmed (670-673), but after a further amendment, by which extensive additions were made to the specification (675-677) an interference with the Podlesak patent was finally declared upon the nine claims in question. (679-682.)

By the amendment above mentioned, which was filed October 18, 1915, the entire descriptive matter found in the specification of the Kane patent as issued, beginning with the words "By referring" line 34 on page 2, and extending to and including line 104 on the same page, was introduced into the specification of the Kane application as a foundation for the new claims copied from the Podlesak patent, no foundation for such claims having previously appeared in the Kane application.* This new descriptive matter was not only *not found* in Kane's original application, filed on February 2, 1910, but it was *not contained* in his *divisional* application filed five years later, on January 14, 1915, upon which the Kane patent in suit was subsequently issued, having been introduced into the divisional application by the above amendment. By the same amendment of October 18, 1915, there was also introduced into Kane's specification the matter now appearing at lines 58 to 75 on page 1 of the specification, to lay the foundation for certain other claims of the Podlesak patents which were introduced by that amendment, and for which no adequate foundation had previously appeared in the application.

The proceedings in the Kane-Podlesak interference—that is, the Transcript of Record before the Court of Ap-

*As hereinafter shown, the Commissioner of Patents and the Court of Appeals for the District of Columbia subsequently held that there was no basis for the claims in Kane's application, even after the extensive addition made to it by this amendment, and finally rejected the claims on that ground.

peals of the District of Columbia, was a physical exhibit No. 56, in the court below, but this is contained in Volume III of the Record, pp. 940-1107. Reference will be made to it as the Interference Record. The decision of the Court of Appeals of the District of Columbia is Defendant's Exhibit 57, and is printed in Volume III. of the Record, pp. 701-702.

Upon the filing of the preliminary statements of the parties it was found that Kane's filing date was earlier than Podlesak's claimed date of invention, whereupon a rule was issued upon Podlesak (in accordance with usual Patent Office practice) requiring him to show cause why judgment should not be rendered against him. (Vol. III., Rec., 1057.) Podlesak thereupon moved to dissolve the interference (which he had not sought) upon three grounds, as follows:

First, that Kane had no right to make the claims in issue because of laches on his part, the claims not having been presented by him for more than two years after the issue of the original Podlesak patent, and not until sometime after the issue of the reissued patent.

Second, that the claims, properly construed, were not readable upon Kane's disclosure.

Third, that if the claims in issue were to be construed broadly enough to be readable upon both Podlesak's and Kane's disclosure, they were met by the prior art. (Vol. III., Rec., 1057-1061).

This motion was supported by a brief filed on behalf of Podlesak and printed in the Interference Record referred to (pp. 1062-1067).

The motion was denied by the Examiner of Interferences, upon a report by the Law Examiner (pp. 1068-1073), and Podlesak appealed to the Board of Examiners-in-Chief. (p. 1074.)

This appeal was taken on April 5, 1916, shortly before the acquisition (on April 20, 1916), of the Kane application by plaintiff and the substitution of plaintiff's

counsel for Kane's original attorney in the prosecution of Kane's application. On April 25, 1916, a motion was made on behalf of Kane, supported by an affidavit of plaintiff's counsel, Mr. Williams, dated April 22, 1916, to advance the hearing of the appeal. (pp. 1075-1078.) This motion was denied (p. 1078) and the appeal came on for hearing in regular course, the brief of Podlesak's attorneys in support of the appeal being found at pages 1079-1090.

The Board of Examiners-in-Chief reversed the decision of the Examiner of Interferences, upon the ground that Kane was barred by his laches from making the claims in question, under the decision of the Court of Appeals of the District of Columbia in *Rowntree v. Sloan*, 227 O. G., 744, the opinion of the Examiners-in-Chief being found at pages 1091-1092 of the Interference Record.

Kane acquiesced in the decision of the Examiners-in-Chief with respect to the first three counts or claims of the interference, which corresponded to claims appearing in Podlesak's original patent, but appealed to the commissioner in respect to the remaining counts, which corresponded to certain additional claims of the Podlesak reissue. (1092-1093). The commissioner affirmed the decision of the Examiners-in-Chief, but based his decision upon the ground that the claims in question were not readable on Kane's disclosure (1105-1106) whereupon Kane appealed from the decision of the commissioner to the Court of Appeals of the District of Columbia. (p. 1107).

The Court of Appeals affirmed the decision of the commissioner and Examiners-in-Chief in favor of Podlesak, in an opinion found at pages 700-702 of Vol. III, basing their decision *both* upon the ground of Kane's laches in making the claims in question and upon the ground that they were not readable upon his disclosure.

Plaintiff, as owner of the Kane application, carried this interference all of the way to the Court of Appeals in its effort to secure for itself and take away from its licensor

the claims of the Podlesak patent under which it held a license and whose validity it had expressly admitted (Vol. I., 53), and did so in direct violation of its contractual obligation to the Podlesaks, under the license contract Exhibit D, to the effect that the parties to such contract "will aid and assist each other in the prosecution of said applications and the obtaining of patents thereon *and in any interference proceedings relating to their right of priority to said invention* and in any suit or proceeding brought under any of the said patents," etc. (Vol. I., 53). The prosecution of the interference on behalf of Kane was not only a violation of this covenant, but it was a direct attack upon the validity of the claims of the Podlesak patent, under which plaintiff was licensed, and whose validity it had expressly admitted in the license contract, such prosecution of the interference involving, as it did, an assertion of priority of invention of the subject matter of such claims by Kane.

Following the decision of the Court of Appeals, plaintiff's counsel, as Kane's attorney, filed an amendment to Kane's application on June 17, 1918, by which he introduced two new and very much broader claims than any theretofore made at any time by Kane during the eight years his application had been pending in the Patent Office, supporting the amendment with an argument respecting the allowability of the claims, in which reference was made to an interview with the examiner by plaintiff's counsel and plaintiff's general manager, Mr. Brown. (Vol. III., 687-693).

The examiner thereupon rejected the nine claims which had been involved in the Podlesak interference, and allowed the two new claims. Plaintiff's counsel then canceled the nine rejected claims, and the two new claims became claims 7 and 8 of the patent as issued.

These new claims were so very broad and general in their terms that they were readable upon Podlesak's disclosure and dominated the latter and the more limited claims directed to it. They were so broad indeed as perhaps to be read on Kane's drawing although the subject

thereof was not mentioned in the description. They were, however, open to the objection that Kane was not entitled to make the claims because of laches, upon which ground the board of examiners in chief had rejected the claims which Kane had copied from the Podlesak patents, and which was one of the grounds upon which the Court of Appeals had affirmed that rejection. In other words, after the examiners in chief and the Court of Appeals of the District of Columbia had both held that Kane had no right to make the more specific claims of the Podlesak patent, because of laches, the primary examiner allowed to him two very much broader claims directed to the same subject matter, these latter claims having been presented for the first time by an amendment dated June 15, 1918 (687), *five* years (instead of two) after the issue of the original Podlesak patent disclosing their subject matter, *and more than eight years after the filing of Kane's application*. Manifestly, if the board of examiners in chief and the Court of Appeals of the District of Columbia were warranted in law in rejecting the claims which Kane had copied from the Podlesak patent, upon the ground that he was barred by his laches from securing those claims because of a delay of a little more than two years in presenting them after the disclosure of their subject matter in the Podlesak patent, there was much stronger ground and better reason for rejecting the new and broader claims directed to the same subject matter which he presented and secured more than five years after the issue of the Podlesak patent and more than eight years after the filing of his own application; but the Examiner appears to have entirely overlooked this objection to the allowance of the claims.

Kane and his privies not only acquiesced in the decision of the Court of Appeals, instead of following up the interference with a bill in equity (Sec. 4915) as they might have done, but his attorneys (plaintiff's present counsel) expressly conceded the binding and conclusive effect of **that** decision. Thus, at page 689 of the Vol. III., in the amendment paper in which they presented for the first

time claims 7 and 8 of the Kane patent which we have been considering, they said:

"The decision of the Court of Appeals awards priority of invention to Podlesak upon the ground that Kane is estopped to make the claims of the Podlesak patent, and the court also expressed its agreement with the conclusion of the Commissioner that the claims of the interference issue are not readable upon Kane's disclosure."

And at page 690:

"The decision of the Court of Appeals is, of course, binding upon the primary examiner to the effect that Kane is now estopped to make these specific detailed claims of the Podlesak patent because of his delay in so doing.

In so far as any prosecution of this application before the primary examiner is concerned *we promptly concede that we are bound by the estoppel of res adjudicata and by the Court of Appeals.* It is clear, however, that this estoppel does not and cannot run as against the claims now presented.

In the first place the estoppel invoked against Kane is based solely upon the fact that Podlesak claimed and issued a patent claiming the invention involved in the interference long in advance of the date at which Kane first claimed this subject matter."

The reason offered why the "estoppel does not and cannot run as against the claims now presented" was solely that the new claims 7 and 8 were broader and more generic claims than those which Kane had been held to be estopped from making by the decision of the Court of Appeals. They were claims to identically the same subject matter, based upon identically the same disclosure as had been the earlier and rejected claims upon which the interference had been contested, being simply expressed in broader terms. As stated by Kane's attorney, contrasting them with the claims which had been involved in the interference (Vol III., 690):

"The two claims presented herewith are not limited to any of these refinements or details."

In other words, having been held estopped by his laches from making the narrower and more specific claims to the same subject matter which he had copied from Podlesak's patent—claims introduced into his application a little more than two years after the disclosure of their subject matter in the Podlesak patent—he successfully asserted his right before the examiner to have allowed to him two very much broader claims, directed to the same subject matter and based upon the same identical disclosure, which he introduced into his application *five years* after the disclosure of their subject matter in the Podlesak patent. If his right to the narrower claims was made *res adjudicata* by the decision of the Court of Appeals—if he was estopped from making those claims because of his laches in presenting them—surely the estoppel applied with still greater force to the broader claims presented three years later.*

The rejection of Kane's claims which he copied from the Podlesak patent, upon the ground of his delay in presenting them after their disclosure in the Podlesak patent, was based upon a decision of the Court of Appeals of the District of Columbia in the case of *Rountree v. Sloan*, 227 O. G., 744 (1916), in which it was held that an applicant who failed to present claims for subject matter disclosed and claimed in an issued patent for more than one year after the issue of such patent would be refused allowance of such claims and an interference with the issued patent. This ruling of the Court of Appeals was followed by it in numerous subsequent cases, and became the rule of the Patent Office. It has been recently modi-

*The statements in this amendment paper and argument, to the effect that Kane's application as originally filed contained "broad claims" to the subject matter in question are erroneous and misleading, since neither his original application nor his divisional application, as originally filed, contained any claims whatsoever addressed to the subject matter of claims 7 and 8 of his patent as issued.

fied, however, by the decision of the Supreme Court in the case of *Chapman v. Winthroath*, 252 U. S., p. 126.

Claims 7 and 8, thus introduced into Kane's application more than eight years after it was filed in the Patent Office, nearly nine years after their subject matter had been introduced into extensive public use,* and some three years after the present suit was begun—and admittedly and avowedly introduced for the purpose of dominating the construction disclosed in the Podlesak patent under which plaintiff held and now holds a license—are the only claims now in suit.

The situation which has resulted from the proceedings which have been reviewed, therefore, is as follows:

1. Plaintiff has secured, in a second patent, the same identical claims which it had secured four years earlier in its Milton patent, thus prolonging its monopoly under those claims by that length of time.

2. After an unsuccessful attempt to secure, for itself, in like manner, nine claims of the Podlesak patent under which it held a license, and whose validity it had both impliedly and expressly admitted (Vol. I., p. 53)—an effort which it carried, by successive appeals, all of the way to the Court of Appeals of the District of Columbia—it has secured in the Kane patent two claims of very much broader scope than the claims which it sought to take from Podlesak, which additional claims were introduced into Kane's application for the first time more than eight years after the filing of the application (February 2, 1910), nearly nine years after their subject matter had been disclosed in Milton's British patent, and nine years after plaintiff, operating under Milton's invention and his Ameri-

*The record shows that plaintiff introduced the structure of the Kane and Milton patents into extensive commercial use in the year 1909, and continuously thereafter in increasing numbers, advertising it as the "Milton Magneto," and after the Milton patent issued marking it patented under that patent.

can application and patent, had introduced the claimed invention into extensive public use.*

Having discussed in detail the most important points bearing on the question of *equitable* estoppel in this case, there still remains to be considered briefly as

CHAPTER VI.

Estoppel by Reason of Contractual Relations of the Parties.

It would be unequitable and unconscionable, under the facts and circumstances, to enforce these claims against plaintiff's licensors and their assigns—indeed there seems to be established a *direct* estoppel.

The claims 7 and 8 relate to the same subject matter as the claims of the Podlesak reissued patent covered by license contract (Exhibit D, Vol. I., p. 53), between the Podlesaks and Plaintiff, being merely claims of broader and more general scope. In accepting a license under the Podlesak patents, plaintiff's predecessor not only impliedly recognized the validity of the claims of such patent, but the license contract contained an express recognition of their validity. More than that, the parties to the contract entered into an express agreement and covenant (p. 53) that

"they would aid and assist each other in the prosecution of said application and the obtaining of patents thereon and in any interference proceedings relating to their right of priority to said invention and in any suit or proceeding under any of said patents," etc.

It was further expressly agreed and understood that the Podlesaks should and did reserve unto themselves the right to make the patented inventions, and it was further expressly agreed and understood that the contract should

*And three years after defendant's devices, against which they are now directed, had been placed on the market,—and nearly that length of time after the present suit was filed.

"extend to and be binding upon the heirs, assigns and legal representatives of the parties of the first part and the successors and assigns of the party of the second part."

As we have seen, notwithstanding these provisions of the license contract, the Webster Company went out and bought up the Kane application. It hoped and endeavored with this to establish a dominating title, covering and controlling the inventions under which it held a license from the Podlesaks. It sought by means of such application to destroy the claims of the Podlesak patent under which it was licensed and whose validity it had both impliedly and expressly recognized; to take such claims away from the Podlesaks and to re-patent them to itself and for its own benefit in the name of Kane; and that, failing in this effort, it finally succeeded in getting through the Patent Office, in disregard and defiance of the decision of the Court of Appeals of the District of Columbia to the effect that it was absolutely barred from making and receiving any claims to the subject matter in question; two broad and generic claims, relating to identically the same subject matter, and covering and dominating the structure of the Podlesak patents under which it was licensed. The respondent here has succeeded to all of the rights of the Podlesaks; and its magnetos which are asserted to infringe the claims of the Kane patent are magnetos employing the structure described and claimed in the Podlesak patents, which respondent is using, and has a full right to use, by virtue of its ownership of the patents and its position as assignee of the rights of the Podlesaks under their license contract with plaintiff.

Can the plaintiff, under these circumstances, and in view of the express provisions of the license contract, be now allowed to assert this outstanding title which it has acquired under the Kane patent (even assuming it to be valid) against the assignee of its licensors with whom it

entered into the agreements and covenants of the license contract?

Had the Podlesaks assigned and transferred their patents to plaintiff's predecessor, instead of merely granting it a license and entering into the agreements of the license contract Exhibit D, and had plaintiff, under such circumstances, granted back to the Podlesaks a license to use the inventions themselves, it would be clear beyond question that the plaintiff could not assert the claims of the Kane patent against them; and if such license to the Podlesaks had been made assignable, as were their rights under the contract Exhibit D, plaintiff would of course be equally precluded from asserting the Kane patent against their assignee.

Is the situation substantially different in this respect, because the Podlesaks *reserved* to themselves and their assigns the right to use the patented inventions, when that reservation is considered in connection with the further agreement and covenant of the parties that they would "aid and assist each other in the prosecution of said applications and the obtaining of patents thereon and in any interference proceedings relating to their right of priority to said inventions, and in any suit or proceedings brought under any of the said patents"? Did not such covenant and agreement, and such reservation to the Podlesaks and their assigns, amount, in legal effect, to an agreement that each party would aid and assist the other in its right to use and enjoy the patented invention in accordance with the terms and provisions of the contract?

Having expressly agreed with the Podlesaks that they should reserve to themselves and their assigns the right to use the patented inventions, and having expressly covenanted and agreed with them that it would aid and assist them in any "proceedings relating to their right of priority to said inventions, and in any suit or proceeding brought under any of the said patents," can the Webster Company be now permitted to employ the Kane patent to de-

stroy the rights which it expressly agreed that the Podlesaks and their assigns should retain—and will a court of equity aid it in such an attempt?

CHAPTER VII.

Divisional Application Not a True Division. No Warrant for Claims 7 and 8.

Claims 7 and 8 of the Kane Patent.

As heretofore stated, these two claims of the Kane patent, which were introduced into the Kane application more than eight years after it was filed and approximately nine years after their subject matter had been in public use, are the only claims now involved in this litigation. They read as follows:

"7. In an electrical ignition device for internal combustion engines, the combination of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an engine cylinder, spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, *a rigid unitary and integral support upon which all of the aforesaid parts are mounted*, whereby all of said parts may be removed from and returned to their position upon an engine cylinder without disturbing their relations one to another, conductors for carrying electric current from said generating winding to said electrodes, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it.

8. In an electrical ignition device for internal combustion engines, the combination of a magneto generator comprising rotor and stator and generating winding, a pair of relatively movable make and break spark electrodes adapted to be located within an

engine cylinder, spring means tending normally to hold said rotor in a certain position, mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor, *a supporting member upon the several parts of which all of the aforesaid mechanism is mounted and having a single integral part adapted to be attached to the engine*, whereby all of said mechanism may be removed from the engine by removing said single integral part and may be returned to its position upon the engine with unchanged relations between any and all of the parts of all of said mechanism, thereby insuring the predetermined synchronism and interrelated adjustment of said mechanism when it is replaced upon the engine, and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it."

The italicized portion of each claim describes the only novel element or feature of the claim. Each and all of the other elements were old, both singly and in combination. In other words, the alleged invention covered by each of the claims consisted solely in mounting the described elements upon "a rigid, unitary and integral support" as described in claim 7, or upon "a supporting member * * * having a single integral part adapted to be attached to the engine," as described in claim 8.

There was no statement or intimation, in the specification and claims of the application as originally filed, that this feature of the disclosure constituted any part of the invention sought to be patented—nothing whatever to indicate that it constituted any part of the applicant's invention. On the contrary, some of the statements of the specification were entirely inconsistent with such a suggestion. Thus, for instance, it was stated in the original specification (Vol. II., 506), that the invention sought to be patented was applicable alike to *magneto generators of the oscillating type and those of the rotary type*, whereas the subject matter of claims 7 and 8 could not possibly

have any application to a magneto generator of the rotary type (employing a rotary armature) since such magnetos are always located at a point adjacent the engine shaft and remote from the ignitor plug and electrodes, as shown, for instance, in the illustrations of such magneto found at pages 581-587 of Vol. II.

Nor did the divisional application, as *originally filed*, contain any statement or intimation whatsoever that the subject matter of claims 7 and 8 constituted any part of the applicant's invention that was sought to be patented. Indeed, the specification as *subsequently amended*, and as it appears in the patent itself, may be read and studied with care without discovering the slightest intimation that the subject matter of those claims constitutes any part of the invention intended to be patented.

Not only so, but the disclosure of the subject matter of the claims in the drawings of the patent and its description in the specification are very meagre, and of doubtful sufficiency to support the claims. Let us consider this latter point.

The disclosure of the drawings is found in Figures 1 and 2, and the description in the specifications, in part, at lines 43-75 on page 1 (Vol. III., 933), read as follows:

"In the drawing, an explosive engine 1, fragments of which are shown, is provided with a suitable opening for the ignition points of a make-and-break system, and around this opening, on the outer side of the cylinder wall, is an ignition block 8, provided with an extension 9 extending through said opening into the cylinder. At the inner end of the extension 9 is carried the fixed contact 10 of the make-and-break system. The electrode 10 is mounted on block 8 and insulated therefrom in the usual manner, such insulation not being shown. At the outer end of the contact member 10 is secured a conductor wire 11, between nuts 12 and 13.

On block 8 is an arm 14 having a bearing member 15 at its outer end. In the bearing member is journaled a shaft 16, which carries the armature or

inductor 17. The inductor 17 rotates between the field cores 18 and 19. The cores 18 and 19 are provided with suitable electrical windings and formed on the pole pieces 20 and 21, and the latter are joined by fixed magnets 22 and 23. The pole pieces 20 and 21 are carried on supporting block 25 which is secured by set screw 25a to the bearing member or bracket on or in which the magneto generator is mounted, thus rendering the magneto generator proper detachable from its firm supporting base, shelf or bracket formed integrally with ignition block or plug 8 as described."

As will be understood from the foregoing, the ignitor block or plug, 8, which fits against the cylinder wall 1 and has the extension 9 projecting through the opening therein, is provided with an arm 14 which projects to the right from the block and carries a forwardly extending hub or bearing member 15 in which is journaled the shaft 16 which carries the armature or inductor. The shaft 16 is not shown in Figure 1, and appears only in section in Fig. 2, but as it is described as carrying the armature or inductor, and the latter is described as rotating between the field cores 18 and 19, it of course follows that the shaft projects outwardly (downwardly in Fig. 1), beyond the bearing in which it is journaled, in order that it may carry the armature or inductor upon or near its outer end, between the field cores 18 and 19. The flaring block 25 (shown only in Fig. 1 and there very incompletely) which is said to carry the pole pieces 20 and 21, is described as being secured to the bearing member 15 by the set screw 25a. This would indicate that the bearing 15 was continuous from its supporting arm 14 to its front end, to which the block 25 is secured, but this is not the fact (at least of the portion shown in Fig. 1) for there is a yoke member described as being secured upon the shaft 16 at a point intermediate the ends of the bearing 15, so that the latter would manifestly have to be cut away or provided with a gap to permit such yoke member to be secured to the shaft journaled in the bearing. This yoke member is shown

in Fig. 2 (being hidden by parts above it in Fig. 1) and is described at the bottom of the second column on page 1 of the specifications as follows:

"Secured on the shaft 16 is a yoke member 30, having two arms extending in opposite directions from shaft 16, with one of the arms 30 positioned at one end of anvil 29, and adapted, upon oscillation of shaft 16, to cause the movement of the anvil to open the contacts 26-10, as will be described later. The arms of member 30 are provided with lateral extensions which are connected to tension springs 31 and 32, said springs being secured at their outer ends to brackets 33 and 34 on pole pieces 20 and 21, so that the tension of the springs 31 and 32 normally maintains the arm member 30 in a position so that one of its arms is in striking relation to the anvil 29, the position of the anvil varying obviously with its described adjustment. On the member 30 is an actuating arm 35 adapted to be engaged by plunger 36. The plunger 36 is actuated from the crank shaft of the engine, not shown."

Now, in order that the yoke member 30 may be "secured on the shaft 16" as described, it is manifest that the bearing member 15 in which the shaft 16 is journaled must be cut away, or have a gap provided in it, about midway of its length to permit the yoke member to be secured to the shaft 16 in the position shown in Fig. 1 where the oppositely extending arms of the yoke member are largely hidden by the parts above them but where its "lateral extensions," to which the springs 31 and 32 are secured, are clearly shown, as well as the upper end of the "actuating arm 35" which is engaged by the plunger 36. But if the bearing member 15 is to be thus cut away or provided with a gap, for the accommodation of the yoke member 30, the question arises as to what then supports the outer end of the bearing member (its lower end in Fig. 1) to which the block 25 which carries the pole pieces 20 and 21 of the field cores is described as being secured by the set screw

25a. The specification of the patent offers no explanation whatsoever, and no support for such portion of the bearing member 15 is disclosed in the drawings, unless it be assumed that it is supported in some undisclosed way from the square arm or bar shown in cross section immediately below the shaft 16 in Fig. 2 and marked with the reference numeral 15. This square arm or bar is not mentioned in the specifications, and there is nothing in the drawings to show what it may be, other than the application of the reference numeral 15 to it, which indicates that it forms some part of the "bearing member" designated by that numeral in the specification. The view in Fig. 2 purports to be "a section taken on the line 2-2 of Fig. 1," but why a cross section taken on that line or in that plane should show the member 15 in cross section does not appear, so that the actual construction, and the entire means for supporting the outer end of the bearing 15 and all of the parts carried by it (the block 25, the pole pieces, field cores, permanent magnets, etc.) is left to conjecture, as is likewise the shape and character of the block 25, the method of attaching the pole pieces and field cores to it, and the manner in which the block itself is or could be secured to the bearing member 15 by a *set screw*, as described.*

The only portion of the specification of the patent as actually issued which even calls attention to the fact that the magneto generator and associated parts are mounted on "a rigid unitary and integral support," as called for in claim 7, or upon "a supporting member having a single integral part adapted to be attached to the engine," as specified in claim 8, is the sentence beginning with the end of line 67 and ending with line 75 on page 1, and *this was new matter introduced into the specification by amendment nearly six years after the filing of Kane's original*

*The cross-sectional view Fig. 2 was evidently not taken throughout on the line or in the plane 2-2 of Fig. 1, since in that event the block 25 would have been shown in section or the end of the tubular bearing for the shaft 16 in elevation, or both.

application (October 18, 1915, Vol. III., 675) as a basis for the claims copied from the Podlesak patents which plaintiff unsuccessfully sought to take away from its licensor in the manner heretofore described. Kane's original specification contained no description whatever of the manner of mounting and supporting the block 25 carrying the pole pieces and field cores of the magneto, unless it is to be found in the language contained in the last paragraph on page 506 of the Vol. II. and reading as follows:

"The laminated cores 18, 19, may be wound in the manner common to this type, one end of the winding indicated at 24 being connected to the supporting block 25 in contact with sleeve 15 and secured thereto by set screw 25a which completes the circuit to the bearing block 8 and the movable electrode 26."

There was no other reference to the block 25 in the entire specification, excepting that on the following page (507) reading:

"To the supporting block 25 is secured the laminated field members 20, 21 which carry the wound cores 18, 19."

In the specification of the divisional application (upon which the patent in suit issued) as originally filed, the description was as follows (Vol. III., 626):

"On block 8 is an arm 14 having a bearing member 15 at its outer end. In the bearing member is journaled a shaft 16, which carries the armature on inductor 17. The inductor 17 rotates between the field-cores 18 and 19. The cores 18 and 19 are provided with suitable electrical windings and are formed on the pole pieces 20 and 21, and the latter are joined by fixed magnets 22 and 23. The pole pieces 20 and 21 are carried on an extension 35 formed on the bearing member 15.

One end of the conductor 11 connects to or is a part of the winding on pole-core 19, and the latter is

connected to the winding on pole-core 18 in the usual manner, and is not specifically shown. The other end 24 of the winding on pole-core 18 is secured to the extension 25 by a set-screw 25a to ground the circuit in the framework of the magneto."

As will be noted from the foregoing, the pole-pieces 20 and 21 were originally described as being "carried on an extension 35 formed on the bearing member 15." (The reference numeral 35 was evidently inadvertently used here for 25). The draftsman of the specification apparently had nothing before him but the Patent Office drawing as it appears in the patent, from which he concluded (as he might well have done) that the part 25 shown in Fig. 1 (and nowhere else) was in fact an extension formed on the bearing member 15 in which the shaft 16 was journaled. Later on, this description was changed, by the amendment heretofore referred to, to that found in the specification of the patent as issued, in which it is stated that

"The pole-pieces 20 and 21 are carried on supporting block 25 which is secured by set-screw 25a to the bearing member or bracket on or in which the magneto generator is mounted, thus rendering the magneto to generator proper detachable from its firm supporting base, shelf or bracket formed integrally with ignition block or plug 8 as described."

But, as heretofore pointed out, even this amended description affords no disclosure whatever of the means for supporting the portion of the bearing member 15 upon which the block 25 "is secured by set-screw 25a," or any disclosure of the form or character of the block, or the manner in which the pole-pieces and field cores are supported and carried by it.

Moreover, the concluding portion of the quoted statement, to the effect that the result of the incompletely described arrangement is the "rendering the magneto generator proper detachable from its firm supporting base, shelf

or bracket formed integrally with ignition block or plug 8 as described," is inaccurate, since under the disclosed construction the magneto generator proper or as a whole is not rendered detachable from its support (the bearing member 15), for the inductor or armature constituting a vital part of the generator cannot be removed with the pole-pieces and field-core and magnets without in some manner disconnecting or loosening the yoke 30 which is secured to such shaft in the gap in the tubular bearing 15. In assembling the parts the only way this yoke member can be gotten in place and secured to the shaft is to insert it in the gap in the bearing and then pass the armature shaft 16 lengthwise through the bearing and through the hub of the yoke-member, and then firmly secure the latter to the shaft by a pin or set-screw or some other means. Until the yoke-member, so secured to the shaft, is released, it is of course impossible to withdraw the shaft from its bearing, so that the magneto generator as a whole cannot be detached from its support by loosening the set-screw 25a, as contemplated by the description in the specification. Moreover, even when the armature shaft is released, so that it can be withdrawn from its bearing, the latter remains an integral part of the "supporting base, shelf or bracket formed integrally with ignition block or plug."

This entire amendment, which was introduced into the application for the purpose of laying a foundation for the copying of Podlesak's claims, was a misfit in both terms and substance. It was a misfit in terms, because there was nothing in Kane's disclosure in the nature of a "shelf or bracket," as there was in Podlesak's, in whose patent those terms were used as aptly descriptive of his disclosure; and it was a misfit in substance, for the reason that in Podlesak's construction the magneto was a self-contained structure mounted upon the supporting shelf or bracket carried by the ignitor plug and bodily removable therefrom by simply loosening the bolts by which it was secured in place (see Fig. 2 of Podlesak patent Reissue 13,878), whereas in the Kane construction, as has been explained, the magneto was

not bodily removable from its support, but had to be removed piecemeal, and leaving the bearings for the armature shaft on the ignitor block or plug of which they formed an integral part. The entire amendment, to both specification and claims, was simply a strained effort on Kane's part to steal Podlesak's claims, without any just foundation for them, as the Board of Examiners-in-Chief and the Court of Appeals subsequently held. It may be noted, in this connection, that plaintiff does not follow Kane's construction, but Podlesak's, in the magnetos which it claims to be manufacturing under the Kane patent, having discontinued the use of the construction disclosed in Kane's patent in 1912 and substituted that of the Podlesak patent. (Vol. I., p. 411; Plaintiff's Exhibit No. 43).

Whether or not, in view of the foregoing, the specification and drawing of the Kane patent can be said to afford a sufficient disclosure of the subject matter of claims 7 and 8 of the patent—claims whose sole novelty consists in the mounting of all of the described parts upon "a rigid unitary and integral support," or upon "a supporting member having a single integral part adapted to be attached to the engine"—it is in any event manifest, from the meagerness of the disclosure, and the history of the application, that the subject matter of the claims constituted no part of the invention which Mr. Kane sought and intended to patent at the time his application was prepared and filed. He either did not consider it *his* invention, or he did not consider it an invention at all. Indeed, Mr. Kane expressly so testified. As hereinafter more fully explained in connection with our discussion of Mr. Kane's claim to having originated the construction disclosed in his patent, as against the contrary claim of Mr. Milton, the only thing which Mr. Kane claimed to have invented, when he disclosed his alleged invention to the patent solicitor, and the only thing which he sought to cover by his proposed patent, was an automatic cut-out which would render the magneto inoperative when the engine exceeded a certain speed. This is the thing described and claimed in Mr. Kane's patent, No.

1,204,573, which was issued upon his original application, and which is incidentally and in part shown in the drawings of his patent in suit. Thus, on page 275, Vol. I. of the record, testifying on cross-examination respecting his disclosure of his invention to his patent solicitor, Mr. Sprinkle, Mr. Kane said:

"Q. Now, what did you tell him at that time was the principal and most important thing which you wanted patented, Mr. Kane? I am talking about your conversation with Mr. Sprinkle, now. What did you tell him was the most important feature you wanted covered by the patent?

A. I told him I thought the big thing about the whole apparatus was how nicely that spark would cut out.

Q. 'Cut-out,' what do you mean by that?

A. The magneto become inoperative.

Q. You told him that was the nicest thing, did you?

A. Yes, sir. I also expressed my opinion. I thought that was a big invention."

And further, at page 277:

"Now, as I understand it, Mr. Kane, you told Mr. Sprinkle that the most important feature of your invention, and that which you wanted him by all means to patent, was the means for automatically cutting out the spark—that feature, is that right?

A. That was one of the things, yes, sir.

Q. Well, now did you tell him that that was the most important thing?

A. I do not know whether I told him, or whether he seized upon that himself. I could not answer that.

Q. I thought that a moment ago you told me that that is just what you told him. Didn't you?

A. I told him I thought that that was the nicest and most ingenious thing in it.

Q. Now, what did you tell him about the means by which the magneto plug was to be attached to the cylinder?

A. Well, outside of telling him that by doing that we had a means of securely fastening the magneto to the cylinder, and also a means of cutting out a lot of intermediate and useless mechanism, I do not know as I told him very much.

Q. You did not consider it of very importance; is that right?

A. It seemed to me a matter more of design than of importance—invention.

Q. Is that what you told him?

A. Yes, sir.

Q. And you told him that you thought that it was not an invention, and was a mere matter of design? You told that to Mr. Sprinkle, did you, when you went to him to get a patent?

A. I told him it was a good means and preferred means of fastening the magneto on the engine.

Q. Well, I ask you if you told him that you thought it was a mere matter of design, and not an invention.

A. I possibly did, yes."

And again, at the bottom of page 281:

"A. I told Mr. Sprinkle that combining this plug and the casting on it *I did not think there was any invention in that*. In Mr. Milton's patent, if I remember rightly, it deals with a trip finger in there, and a cam surface, and that sort of stuff."

Mr. Webster, plaintiff's president, and a man of long experience in patent matters, had also expressed the opinion that there was nothing patentable in it. (Vol. I., pp. 255, 256, 273, 308).

Plaintiff has introduced voluminous proofs into the present record, for the purpose of showing that this mounting of the magneto upon the ignitor plug was really the great feature of Mr. Kane's alleged invention, that it solved a difficult problem which had been confronting plaintiff and its customer, the International Harvester Company, and one upon which the minds of many people

interested in the subject had been concentrated; but the specification and drawings of the patent itself, and the history of the application and the testimony of Mr. Kane, show that it was not considered a patentable invention by anyone, with the result that it was not only incompletely and imperfectly disclosed in the drawings and specification of the application, *but no claim in any manner directed to its subject matter was presented.*

The subject matter of present claims 7 and 8 manifestly did not embody anything patentable, according to the views of either the inventor or his patent solicitor, or of plaintiff company for whose use the construction embodying the alleged invention was designed.

CHAPTER VIII.

Chapman-Winthroath, 252 U. S., p. 126.

While, as heretofore pointed out, the Court of Appeals of the Seventh Circuit, in deciding this case, did not make the decision of the Court in *Chapman v. Winthroath*, the controlling factor, but decided for defendant appellee on other grounds, as has been pointed out in the decision above quoted on page 6, yet as the writ of certiorari was granted presumably because of the statements made in brief for petitioner as to the misapplication of that doctrine by the Court of Appeals, it becomes necessary to consider that case.

Briefly, the facts in that case were, as follows: The Chapmans had filed an original application on March 10, 1909. While it remained pending, Winthroath, on December 2, 1912, filed an application relating to the same subject-matter, upon which a patent issued to him on November 25th, 1913. On June 6th, 1915, the Chapmans filed a division of their original application, in which they presented claims from the Winthroath patent. An interference was declared between this divisional application and

the Winthroath patent, which was prosecuted by successive appeals to the Court of Appeals of the District of Columbia. That court held in accordance with the previous ruling in *Rowntree v. Sloan*, App. D. C. 45, p. 207, that the Chapmans were barred from receiving the claims in controversy by the fact that they had not prosecuted them within one year after the date of issue of the Winthroath patent—basing its decision, as stated by the Supreme Court, upon the ground that the divisional application should be regarded substantially as an amendment to the original application and that it would be inequitable to permit a longer time for filing it than the one year allowed by the statute (Section 4894), for the further prosecution of a pending application after official action thereon. In other words, it applied the doctrine of equitable estoppel.

The court reversed the decision of the Court of Appeals of the District of Columbia, but based its reversal upon the sole and express ground that less than *two* years had elapsed between the issue of the Winthroath patent and the filing of the divisional Chapman application.

In its consideration and construction of Section 4886 of the Revised Statutes, which it referred to as

“fundamental to all others in our patent laws” the court drew no distinction whatever between original and divisional applications. Thus, starting with Section 4886 as a basis, and referring to it, as above, the court goes on to say that the prior patent may not be a bar to the grant of a subsequent patent on the same invention to an earlier inventor, *provided*

“that his application is filed not more than two years after the date of the conflicting patent. The applicant may not be able to know that he was the first inventor, but the statute gives him two years in which to claim that he was and secure the institution of an interference proceeding.”

The Court then refers to the “two years” provision in Sections 4887, 4897 and 4920, and also to the judicial

two years rule in reissue cases, and in conclusion, states that the Chapmans were within their legal rights in filing their divisional application *at any time within two years after the publication of the Winthroath patent.*

If it is not the inevitable deduction from the reasoning of the Court—if it did not in fact mean to hold that prior patenting or publication—i. e., the setting up of an adverse claim or right, of which the applicant had notice—more than two years prior to the filing of a divisional application will constitute a bar to such application, then there was no reason for its extended discussion of the two years' rule in respect to any defenses.

It might have disposed of the whole controversy in a word, to the effect that the Chapman divisional application was entitled to the benefit of the date of their original application for all purposes, and that the Winthroath patent could not, therefore, constitute a bar to it on any ground. It did not pursue such a simple course, but, on the contrary, in a carefully and clearly reasoned out opinion, held that the Winthroath patent was not a bar because and *solely* because the divisional application was filed *within two years after* the issue of the Winthroath patent.

From the language used by the Court, it may well be argued and has been so held by at least one Federal Judge—(Northern District of New York—*American Laundry Co. v. Prosperity Co., Inc.*), that, under this decision all the statutory bars, including that of two years prior public use, apply to divisional applications.

That this view was held by the Court of Appeals of the Seventh Circuit is the principal ground urged by the petitioner in his application for writ of certiorari.

No such ruling was made by the Court of Appeals of the Seventh Circuit in this case. It held the Chapman-Winthroath case applicable to the case because of the issuance of the intervening patent more than two years prior to the filing of the Kane divisional case, but based the decision

mainly on the gross inequities practiced by the patentee, all of which will be referred to hereinafter.

While perhaps the language of this Court in the Chapman-Winthroath case affords a *foundation* for the contention that its intent was to hold rigidly the statutory bars against a divisional as well as the parent case (for no where in the statutes are divisional applications mentioned except in the reissue statute (Section 4916), in which authority is given the Commissioner to reissue a patent in divisions), it is perfectly true that the doctrine so extended could work many hardships, as, for example, where a requirement for division is not made by the Patent Office until the invention has been in public use two years, or where, by the prosecution of a case in the Patent Office, a division becomes necessary. Furthermore, such a holding as to the meaning of the language would, in effect, amount to a reversal of the decisions of this Court and of other courts where divisional applications have been held to have all the benefits of the parent case on the question of priority.

That the Court did not mean its language to be thus construed would seem to be indicated by the following quotation from the decision:

"To this we must add that not only have later or *divisional* applications not been dealt with in a hostile spirit by the courts, but, on the contrary, designed as they are to secure the patent to the first discoverer, they have been favored to the extent that where an invention clearly disclosed in an application, as in this case, is not claimed therein but is subsequently claimed in another application, the original will be deemed a constructive reduction of the invention to practice and *the later one will be given the filing date of the earlier, with all of its priority of right.* *Smith & Griggs Manufacturing Co. v. Sprague*, 123 U. S. 249, 250; *Von Recklinghausen v. Dempster*, 34 App. D. C., 474, 476, 477; 154 O. G., 252."

We believe the true intent of the decision is to apply the doctrine of *equitable estoppel* against the patentee who

delays more than two years after the issue of the intervening patent, or assertion of an adverse right; the two years limit being set by analogy to the statutes just as the two years rule in reissue cases was fixed by analogy to the Statutes. That this is the real doctrine is shown by the attitude of the Court of Appeals of the District of Columbia in the decisions rendered by that tribunal following the decision of this court in *Chapman v. Winthroath*. Great weight should be given to these opinions because, to use a plain expression, said Court is the tribunal which recently has set this "ball a-rolling."

In *Wells v. Honigmann*, 267 Fed. 743, it was held that Wells was not *estopped* by over one year's laches, to copy the claims of Honigmann's patent in a renewal application filed while Wells' original application stood forfeited for non-payment of final fee.

In *Replogle v. Kirby*, 269 Fed. 862, no divisional application was involved, the sole question being whether Replogle was *estopped* by reason of 15 months' laches after the issue of Noguchi's patent from copying the claims by amendment into his original application. The Court held that under the Chapman decision he was not *estopped*.

In *Ransdall v. Jahns*, 273 Fed. 365, it was held that Jahns was not *estopped* to copy Ransdall's claim twenty months after Ransdall's patent issued.

In *DeFerranti v. Harmatta*, 273 Fed. 357, it was held that DeFerranti was *estopped* to copy Rietzel's claims more than two years after Rietzel's patent issued and therefore he was equally *estopped* as against Harmatta, who had been held entitled to copy Rietzel's claims as the prior inventor.

In *Ex parte Nathan*, 279 Fed. 925, it was held that Nathan was *estopped* to copy the claims of an Anderson patent more than two years after Anderson's patent issued, even though Nathan had prior to the Anderson patent's issuance attempted to obtain similar claims for himself, failed and abandoned the attempt.

In *Wahl v. Main*, 280 Fed. 974, Wahl in his original application disclosed but did not claim the counts of the interferences. Four and a half years after the issuance of Main's patent, he copied Main's claims. No excuse was offered for his delay. It was held Wahl was *estopped* to copy Main's claims.

These decisions are all based on the rule of *estoppel* to copy after two years the claims of an issued patent—that is, estoppel against delay in moving to overcome an asserted adverse right. Whether they were copied in an old *original* application or a new *divisional* application is immaterial. In other words, in reaching the conclusion arrived at, the Supreme Court held that, under the statutes, Chapman had a right to file an original application embodying the same claims at any time within two years after the issue of Winthroath's patent; that the Court had always been favorable to divisional applications, as quoted above, and certainly should not hold Chapman estopped by laches to make the claims in a divisional application based on an earlier original application, when, under the strict language of the statute, he would have been entitled to make the claims in a newly filed original application. He should not be worse off because he had a prior application pending than if he had made a fresh start.

This is entirely different from a case where a divisional case is filed more than two years after the grant of the intervening patent and where the adverse right has been set up and has been in existence for the two years.

It is perfectly clear from the decision of the Supreme Court that, had the Chapman case not been filed until more than two years after the Winthroath patent, he would have been held estopped from obtaining a valid patent upon the subject matter just as an original application filed at that time would have been barred by the two years prior printed publication or patent, except that in the latter instance the bar would have been *statutory*, whereas in the former instance it would have been equitable estoppel with

the two years period prescribed, by analogy to the two years statutes.

The present case is, of course, much stronger because not only were the intervening rights set up more than two years prior to the filing of the divisional application, but the original application, (as appears from the testimony by Kane himself), was not intended to include the "bracket construction" for which claims were not introduced until after the divisional application was filed.

Of the original twenty-four claims which were filed with the original application, there does not appear to be one which is directed to this subject matter; and, if there were; on February 12, 1912, every claim was erased except the two for the automatic cut out, which appeared in the patent, and even when, in November, 1914, claims were added to the Kane application for the purpose of provoking an interference with Milton, claims for the bracket feature (the subject of claims 7 and 8) were not included. In fact, they were not included when the divisional application was filed (January, 1915), but were added later for the purpose of interference with the Podlesak patent, more than two years after the issuance of the Podlesak patent, and when so first introduced were rejected by the Examiner as not being warranted by the disclosure of either the original or divisional application and not finally admitted until October, 1915. (See Chapter on *Kane v. Podlesak*).

Applying the rule of equitable estoppel and interpreting the language of this court in the Chapman-Winthroath case according to the facts of that case, we find that this court held that, in spite of the intervening adverse right (Patent of Winthroath) Chapman having filed his divisional application with the claims of that patent before two years had expired, could not be barred thereby.

Thus we find as to the Chapman-Winthroath case—

1. That there was no question respecting the adequate and complete disclosure of the invention in both the original and divisional cases;

2. The divisional application, as and when originally filed contained the claims in controversy—claims copied from the issued patent with which an interference was sought.

3. The divisional was filed within two years from the issue of the intervening patent.

In the present case—

1. The disclosure of the subject-matter of the claims was so inadequate and incomplete in both the *original and divisional* application as to raise grave question as to whether the original disclosure was sufficient to support the claims even when after long delay they were inserted, and requiring, in any event, amendments and additions to both specification and drawings to lay foundation for them.

2. The *divisional* application when filed contained no claims in any manner directed to the subject-matter of the principal claims subsequently copied from the Podlesak patent and introduced into said divisional application by an amendment filed more than two years after the Podlesak patent, disclosing and claiming said subject-matter, issued.

3. If it is contended that the parent application of Kane *did* show an attempt to claim the subject matter in suit, he abandoned it by striking out, on February 12, 1912, any claim which in any manner might suggest the invention in controversy prosecuting his case on another invention and not restoring any claims for any semblance of the feature in dispute for more than two years, viz: until *April* 1915, although he had in November 1914 put in claims to cover *one* intervening patent (Milton) and had filed his divisional application *for that purpose alone* in *January* 1915.

4. His own testimony shows that he didn't have the invention in dispute in his parent application—

“Q. What? Didn't Mr. Webster ask you to help him out in connection with the means of fastening the magneto and the plug to the engine?

A. No, sir, he did not.

Q. He didn't discuss that at all with you prior to the time that you filed your application?

A. He did prior to the time we filed the application.

Q. Well, when was it he discussed that with you?

A. Discussed that with me when I showed him the drawing.

Q. Mr. Kane, is there anything on that drawing—the first one that you had—showing any means of regulating or determining what you call the cut-out of the spark?

A. No, sir, there is not.

* * * * *

Q. Now, what did you tell him about the means by which the magneto and plug were to be attached to the cylinder?

A. Well, outside of telling him that by doing that we had a means of securely fastening the magneto to the cylinder, and also a means of cutting out a lot of intermediate and useless mechanism, I do not know as I told him very much.

Q. You did not consider it of very much importance; is that right?

A. It seemed to me a matter more of design than importance—invention.

Q. Is that what you told him?

A. Yes, sir.

Q. And you told him that you thought that it was not an invention, and was a mere matter of design? You told that to Mr. Sprinkle, did you, when you went to him to get a patent?

A. I told him it was a good means and preferred means of fastening the magneto on to the engine.

Q. Well, I asked you if you told him that you thought it was a mere matter of design, and not an invention.

A. I possibly did, yes." (Vol. I., p. 275).

And again on page 281:

"A. I told Mr. Sprinkle (his attorney) that combining this plug and the cutting out *I did not think there was any invention in that*. In Mr. Milton's patent if I remember it deals with a trip finger in there and a cam surface, and that sort of stuff."

5. Adverse intervening rights had been asserted more than two years before the *filing* of the divisional case, and more than five years before the filing of claims 7 and 8 sued on.

A brief review of the instant case shows how emphatically the doctrine of equitable estoppel set forth in *Chapman v. Winthroath* applies here. Kane's original application was filed February 2, 1910, and he said he didn't say anything about *this* invention to his attorney, except that he had no invention. His divisional application was filed January 14th, 1915.

The entire subject matter disclosed in both applications had been in public use and on sale *for more than five years* prior to the filing of his divisional application—since the summer of 1909—the first magnetos embodying such subject matter having been built in April and May, 1909, and tested out and demonstrated at that time, and having gone into commercial production shortly afterward.

The application for Milton's British patent, disclosing the subject matter of all of the claims of the Kane patent in suit, was filed October 28, 1909 (Ex. Bk. 397-403), and the application was allowed and the patent sealed and became effective a few months later, so that the subject matter of the claims of the Kane patent was also patented and disclosed in a patent and printed publication, in and by Milton's British patent, five years prior to the filing of Kane's divisional application.

The only claims contained in Kane's divisional application as originally filed were the six claims copied from Milton's American patent (No. 1,096,048), which had been applied for on October 28, 1910, and issued May 12, 1914. It contained no claims in any manner directed to or toward the subject matter of the Podlesak "bracket" claims subsequently introduced into Kane's application, or the subject matter of claims 7 and 8 of Kane's patent, which were introduced several years later. Nor was there anything in the specification of the divisional application as origin-

ally filed to indicate that such subject-matter constituted any part of the invention intended to be patented.

The first claims relating in any way to the subject-matter of the Podlesak claims referred to, or to the subject matter of claims 7 and 8 of the patent as issued, were introduced by an amendment filed April 17, 1915, *more than two years* after the issue of the Podlesak patent, No. 1,055,076 of March 4, 1913, disclosing the same subject matter and containing some of the same claims, *and nearly six years* after the subject matter of the claims had been *disclosed* in Milton's British patent and introduced into public use and placed on sale in this country.

Claims 7 and 8 of the Kane patent were introduced by an amendment filed June 17, 1918. (Vol. III., 687). These claims were directed to the same subject matter that was disclosed in the Podlesak patent of March 4, 1913, and they were based upon the identical construction which had been in public use and on sale in this country since the middle of the year 1909, and which was disclosed in and covered by Milton's British patent of that year. Their subject matter had, therefore, been patented and described in a printed publication more than eight years earlier, in the Milton British patent and more than five years earlier in the Podlesak patent, and had been in public use and on sale by plaintiff itself for practically nine years, by defendant itself for three years, acting in accordance with its rights under the Podlesak patents, under which plaintiff petitioner also had licensed rights.

The practice of many concerns to hold indefinitely in the Patent Office applications including various features of invention, and using these applications as a basis for the introduction of new claims into the application long after they have been filed, or by so-called divisions, for the purpose of covering developments of the art, has resulted in shameful abuses, of which the instant case would be a striking example if the Kane patent were held valid. It certainly seems intolerable that an applicant can introduce broad claims to certain subject-matter for the first time.

years after his application has been filed, years after the subject-matter of the claims has been disclosed in printed publications and patents, and has gone into public use, and to be able to secure such claims and have them sustained. The abuses which have grown up under the practice above mentioned are as flagrant as those which grew up under the old reissue practice, and this court did not hesitate to cure that practice by judicial application of the two years rules to such cases. Such practice has been condemned by many of the courts and commented on. Only recently Judge Hough, in deciding a case where the original application had after a long lapse of time been revamped and modified to include the development of the art, stated

"that such things are permitted is a disgrace to our patent system."

(Opinion not reported but affirmation in 290 Fed. Rep., p. 184).

Because an inventor under these circumstances has been held to be within statutory rights, these abuses have been allowed to go on, the only redress being that the courts have in many cases, gone out of their way to put a narrow meaning upon the claims so as to be able to hold non-infringement.

In this instant cause, however, while all these abuses would be given a clean bill of health, if this Kane patent were sustained, it fortunately happens that the facts in the case are such as to warrant the application of the doctrine of equitable estoppel, and that, too, without any straining of the principles of that doctrine.

The two years statutory bar to the grant of a patent and its consequent invalidity, if granted, are based on the statutes 4886, 4887 and 4920, and are two years public use prior to the filing of the application, or a two years prior patent or printed publication—that is, "patented or de-

scribed in a printed publication in this or any foreign country."

In reissue cases another two years bar was created by this court, not as a statutory bar but as an *estoppel*, with two years as the period. The purpose was to put a stop to the practice in vogue of reissuing a patent with claims added for the sole purpose of covering later developments in the art, many of these reissue applications being based on chimerical contention that obscure drawings and insufficient descriptive matter established a basis for such claims.

The present erroneous contention of plaintiff is that the decision of the Court of Appeals in the present case is a ruling that all divisional cases are bound by the same statutory bars as an original application, and is, therefore, contrary to the rulings of this court in cases such as *Smith & Griggs Mfg. Co. v. Sprague*, 123 U. S. 249, and others.

In the cases cited the division was a real division carved out of the original, with full disclosure in the original; and there was no adverse right asserted between the date of the patent application and the filing of the divisional, and two years old at the time of filing the divisional case.

Again, in the particular matter of the *prior patent and publication* two year rule, there is every reason for applying the rule with the greatest strictness if the applicant of a pending application with divisible subject-matter therein on knowledge of the issuance of a patent conflicting with that divisible subject-matter fails to protect his rights within two years from the date of that patent. He should lose his rights and the bars should be strictly enforced against him. The reason for this is perfectly obvious.

The patent monopoly is a beneficial monopoly. This reward (a monopoly for a term of years), is given the inventor who, instead of keeping his invention a secret, places it before the public in such a way that, at the end of a restricted term, the public is free to use it. In other words, the object is to open the invention to the unlimited use of

the public in the shortest possible time. Therefore, the statutory two years bars were created to protect the public and to impose a duty on the inventor. The purpose is entirely thwarted if an inventor can file an application, keep it in the office indefinitely and at any time—two years, five years or ten years—after he knows that intervening patents have issued, or that adverse rights have been set up, still be able to file divisional applications, to destroy those intervening patents, and not only to destroy those patents but to prolong his own monopoly and take away from the public the right to enjoy the use of that intervening patent at the end of its seventeen years monopoly. Surely the two years bar by estoppel should apply to such a case—just as to the parent case.

It cannot be gainsaid that it is applicable in a case like this, where, as we have shown, the alleged division was not a true division and there was no attempt in the parent case to claim the invention, and no descriptive matter to warrant it, but where, on the contrary, there is express testimony by the inventor and the President of the plaintiff corporation, the applicant's employer and personal friend, and the one who was offered the control of it, that he made no claim to such an invention and didn't consider there was any invention in that which after eight years from the filing of the present case they consider a broad invention, to be utilized by them to prolong their monopoly, and to destroy the contractual relations existing between themselves and their licensors and the latter's assigns, and that, too, in express violation of one of the provisions of that contract "to aid and assist," etc.

Consideration should be given to the other mentioned inequities practiced by plaintiff. We think the general doctrine as to equitable estoppel arising from the grant of an intermediate two year old patent is well stated by the Court of Appeals of the District of Columbia, in *re Josephine F. Fritts, Administratrix of the estate of Charles E. Fritts*, 45 Appeals, D. C., page 211, which was the first de-

cision of the Court of Appeals of the District along the lines of the doctrine thereafter announced by them in *Rowntree v. Sloan*, *Winthroath v. Chapman*, etc. In that case, the Court said:

"It was his (inventor's) duty, within a reasonable time after the issuance of those (intervening) patents, to assert his claims thereto, to the end that an interference might be declared and the issue of priority determined. By failing to assert such claims, he must be held to have abandoned them.

"Monopolies are inherently obnoxious, and it is solely because of ultimate benefit to the public that a conditional form of monopoly is permitted an inventor. When the element of diligence or good faith in an applicant is lacking, there is no valid reason for such a construction of the patent laws as would effect an extension of the limited monopoly granted upon prescribed conditions which include those very elements. Inasmuch as even diligence and good faith do not entitle one to a monopoly, it is not perceived why delay and the lack of good faith should do so."

Since this brief was completed, and ready for the printer, the case of *American Laundry Co. v. Prosperity Co.*, has been decided on appeal to the Court of Appeals of the Second Circuit.

Judge Hough rendered the opinion of the Court, which was concurred in by Judge Mayer and Judge Manton.

The Court held that Chapman-Winthroath did not particularly apply the statutory bars to divisional applications. They said:

"There is no intent shown by that decision to overrule earlier cases dealing with divisional applications in no 'hostile spirit.' Some are cited with approval at page 137 of the report. Divisional and renewed applications (absente intervening rights), should logically be treated alike—see *Godfrey v. Eames*, 1 Wall. 317; *Smith v. Goodyear*, 93 U. S., 486."

The decision in this and other circuits were not overruled or adverted to; *Victor Co. v. America &c.*,

Co., 145 Fed. 350; *General, &c., Co. v. Continental, &c., Co.*, 256 Fed. 660; *Rosenwasser v. B. E. Mfg. Co.*, 264 Fed. 114.

"It cannot be thought that the Court intended to overset without comment the whole current of authority; something so firmly established that it had long passed unchallenged into textbooks."

* * * * *

"it is the theory of laches that underlies and in truth constitutes the decision in Chapman's case. The result is that Chapman was finally held not guilty of laches in taking (for interference with Winthroath) the latter's claim, and annexing the same to his specification, more than one year, i. e., twenty months after Winthroath obtained a patent. Delay, inaction or laches were measured by the two years space of R. S. 4886, and other sections of the patent law and not by R. S. 4894 as the lower court had ruled in *Rountree v. Sloan*, 45 App. D. C., 207.

* * * * *

There is no reason for any such special rules as to divisional applications. * * * What the office and all the courts were considering in the Chapman case, was the evil of applicants who had not claimed, watching the published art, and demanding interference with men whose patents quite likely suggested to them what they might have done. Such men can only be disciplined under existing statutes, by somewhat drastic imputations of laches, or establishing estoppels; and the Chapman decision has, we think, been so understood by the very court whose endeavors at discipline, the Supreme Court found too drastic. For example, *ex-parte* Nathan, 279 Fed. 925, pointing out that 'no excuse is offered' by the divisional applicant for not filing within two years of issue of intervening patent. If the rule were not of assumed or imputed laches, but of statutory firmness, why refer to excuses? Also, see *Ransdall v. Jahns*, 273 Fed. 365, where no division of application was made, and (seemingly) none was possible, but the doctrine of Chapman's case was applicable.

* * * * *

We still think in the Supreme Court, also, that in the absence of laches, estoppel or intervening

rights, a divisional application relates back to the original from which it was carved.

* * * * *

The ordinary difficulty with divided, renewed and sometimes even amended applications, is that they are efforts to validate something that was not carved out of anything but 'second thoughts,' and cannot be called amendments of any original." (bold type ours).

In the present case we have shown, we believe, that the Kane alleged divisional application insofar as it relates to the claims in suit, was not a division and, therefore, all the *statutory* bars apply, but if there were foundation for these claims in the original showing of the parent case, the subject matter thereof was *abandoned* by the inventor, was restored more than five years thereafter; not in the divisional case as filed, but by amendment made after a decision on claims for the same subject matter, *but not so broad*, had become final against the plaintiff-petitioner, even said interfering claims not having been made in the divisional case as filed, but inserted by amendment which involved the necessity of much additional description to the specification and made more than two years after the patent with which interference was asked (Podlesak) and in which judgment was entered against plaintiff-petitioner.

The language of the Court of Appeals, in deciding this case, is very apt where it stated, in effect, that, so long as plaintiff-petitioner thought it controlled Podlesak's as well as Milton's, it was not much worried as to who was the inventor, but when it found that its asserted rights under Podlesak were challenged, it then desired to destroy even its own property right therein if it could take the patent away from Podlesak, so it amended the Kane specification and added claims, fought Podlesak in an interference, and was beaten. Then it tried another tack, and put in some more claims as late as June, 1918, and by *ex-parte* proceedings they were granted.

Certainly in this case there is laches, abandonment, estoppel and intervening rights as mentioned in the recent decision of the Court of Appeals of the *Second* Circuit.

It should also be borne in mind that the patentee himself (Kane) before his invention was taken over by plaintiff-petitioner, was guilty of laches. Milton and Kane were co-employees. Kane took his alleged invention of the automatic cut-out to his attorneys and made no statement to them that there was anything of invention with respect to which these claims 7 and 8 were afterwards granted in the patent.

On the other hand, he expressly said that there was no invention in this feature. He filed his application for the automatic cut-out, permitted plaintiff petitioner to market magnetos for five years containing the Milton invention in detail, as well as this feature. He then decided, after the issuance of the Milton patent, that he was the real inventor of the subject matter of such patent and filed a divisional application for the purpose of provoking such interference. He also permitted the plaintiff-petitioner to manufacture for a period of years under the special bracket construction of the *Podlesak* patents and did not decide until five years after his application had been filed, and two years after the *Podlesak* patents had issued, that that ought to be his property, so that even the applicant himself, were he himself now in control of the patent, would be barred from upholding its validity by reason of his own laches. See *Kendall v. Winsor*, 21 How. 322, 329, in which the Court said:

"It is, said the Justice (Daniel) the unquestionable right of every inventor to confer gratuitously the benefits of his ingenuity upon the public, and this he may do either by express declaration or by conduct equally significant with language—such, for instance, as an acquiescence with full knowledge in the use of his invention by others; or he may forfeit his rights as an inventor by a wilful or negligent postponement of his claims, or by an attempt to withhold the benefit

of his improvement from the public until a similar or the same improvement should have been made and introduced by others."

Then comes along the plaintiff-petitioner and "out-Herods Herod" in the inequities practiced by it—not only conducting the Milton-Kane interference in the manner we have discussed, but fighting a losing fight on the Podlesak patents, as has been set forth, and then coming in with these two claims 7 and 8, for the purpose of prolonging its monopoly on its own Milton patent, destroying the property of its licensors under the Podlesak patents, and keeping a monopoly of the whole thing for a period of more than twenty-one years instead of seventeen years, as provided for by the statutes.

This case would seem to come under the principles announced by this Court recently in *Woodbridge et al. v. The United States*, where the Court said :

"No case cited to us presents exactly these facts, but the general principles upon which this Court has proceeded in cases of abandonment by conduct and its views of the rights of the public and the purpose of the constitutional authority to grant patents and of Congress in its legislative execution of that purpose, set forth in those cases, leave no doubt of the conclusion we must reach. *Penock v. Dialogue*, 2 Peters 1; *Wyeth v. Stone*, 1 Story 273, 282; *Shaw v. Cooper*, 7 Peters 292; *Kendall v. Winsor*, 21 How. 322, 329; *Planing Machine Co. v. Keith*, 101 U. S., 479, 485; *United States Rifle & Cartridge Co. v. Whitney Arms Co.*, 118 U. S. 22, 25."

Railway Co. v. Sayles, 97 U. S., 554, 563.

It would also seem that the familiar doctrine of *Railway Co. v. Sayles*, and the legion of later cases following and applying it, is applicable to and conclusive of the present case. Certainly a more flagrant instance of the broadening out of a pending application, and the introduction of

claims to new subject matter not previously claimed or indicated to be any part of the invention sought and intended to be patented, for the purpose of dominating and suppressing the use of inventions or devices which the public had been enjoying for years, and in the present instance prolonging in time and extending in scope the monopoly which the owner of the patent had previously held and asserted under another patent, has rarely come before the courts.

After introducing the invention into public use as Milton's invention, and deliberately patenting it as his invention, with full knowledge at the time of all of the facts now brought forward to show that another was the real inventor, and after advertising and selling the device as "Milton's Magneto," and marking it patented with the date of his patent after the patent issued, and asserting his patent against alleged infringers, plaintiff discovered an opportunity to not only prolong the life of the monopoly which it had been enjoying under his patent, but to widely extend its scope as well, so it acquired Kane's application and succeeded in taking away Milton's claims and repatenting them to Kane by means of an uncontested interference of which it controlled both sides; further attempted, but failed, after carrying its efforts all the way to the Court of Appeals of the District of Columbia, to likewise take away from its licensor, Podlesak, and repatent to Kane nine claims of Podlesak's patent under which it had been licensed and was operating; and, finally, succeeded in getting through the Patent Office, in defiance and disregard of the decision of the Court of Appeals, two broad claims relating to subject matter which had not only not been claimed, but which had not been even clearly disclosed in his original application, or in any manner indicated to be a part of the applicant's invention until more than five years after the filing of the application, and a still longer period after their subject matter had been disclosed in a patent to another and introduced into extensive public use, and which were finally allowed and patented to the plaintiff nine years after their subject matter had

been introduced into public use and placed on sale by plaintiff, operating under the invention and patent of another. Not only so, but the two claims in question were introduced for the first time long after the present suit was filed, and for the manifest purpose of dominating and controlling the devices and structures of the defendant, at which said suit was directed, which devices were then in extensive public use and on sale.

What the plaintiff has in effect accomplished has been to reissue its Milton patent, with broad claims to subject matter not in any way covered by the claims of the original patent—claims which it could not lawfully have made in a reissue application—and at the same time extended the period of the monopoly of the original patent four years.

Surely, there is every equitable and just reason why the ruling of the Supreme Court in *Chapman v. Winthroath* and the doctrine of *Railway Co. v. Sayles* should be applied with full force and effect to the facts and circumstances of the present case. In *Railway Co. v. Sayles* the Supreme Court, referring to amendments made to pending applications for the purpose of enlarging their scope, said:

“The law does not permit such enlargements of an original specification, which would interfere with other inventors who have entered the field in the meantime, any more than it does in the case of reissues of patents previously granted. Courts should regard with jealousy and disfavor any attempts to enlarge the scope of an application once filed, or of a patent once granted, the effect of which would be to enable the patentee to appropriate other inventions made prior to such alteration, or to appropriate that which has, in the meantime, gone into public use.”

That such was the exact purpose and effect of the introduction and allowance of Kane's claims now under discussion cannot be doubted. The very devices of the defendant at which the claims are directed in the present

suit had been in public use and on sale more than two years prior to the introduction of the claims,—indeed, the suit itself had been pending nearly three years—so that the purpose and effect of the claims was not only to appropriate that which had, in the meantime, gone into public use at the hands of the plaintiff, under another invention and patent, but which had likewise gone into public use at the hands of the defendant itself.

In *Hobbs v. Beach*, 180 U. S., 383, 396, in which the doctrine of *Railway Co. v. Sayles* was pressed upon the attention of the court in the defendant's behalf, the court declined to apply the doctrine upon the ground that, while there had been an expansion of the original application, such expansion had not been with reference to and had no effect upon anything which had gone into use or been given to the public in the meantime. Referring to the amendments made to the application, and to the machine used by the defendant and known as the Horton machine, the court said (pp. 395, 396):

"All this was prior to the invention of the Horton machine, which was first put into use in September, 1889. Of course, the amendment of May, 1886, could not have been made with reference to this device. It is true that, in November, 1890, after application had been made for the Horton patent, new specifications and claims were filed, in which the invention was stated much more in detail, and with much fuller and more accurate language than before. But there appears to have been no attempt to expand the original claims for the purpose of including the Horton patent."

After then referring to its prior decision in *Railway Co. v. Sayles*, and quoting the language which we have quoted above, the court continued:

"Had there been any expansion of the original specification and claims subsequent to the introduction of the Horton machine, especially if made with

reference thereto, *we should not have hesitated to apply the doctrine of that case.*"

In the case now before the court, on the other hand, claims 7 and 8 of the Kane patent were introduced into the application three years after defendant's devices, at which the claims are now directed, were put in public use and on sale, and nearly three years after the present suit had been brought—and nine years after the subject matter of the claims had been introduced into public use and placed on sale by the plaintiff, then operating under Milton's invention and patent. Surely, had the facts of the present case been before the Supreme Court in the reported case it would not have hesitated to apply the doctrine of *Railway Co. v. Sayles*.

See, also:

- Steward v. American Lava Co.*, 215 U. S., 161;
- Kittle v. Hall*, 29 Fed. Rep., 508, 513;
- Dunn v. Savage*, 30 Fed. Rep., 366, 368, 369;
- Con. El. Light Co. v. McKeepsort*, 40 Fed. Rep., 21, 26;
- Hestonville Co. v. McDuffee*, 185 Fed. Rep., 798, 802;
- Gilmer Co. v. Geisel*, 187 Fed. Rep., 606, 610;
- United Wireless Co. v. National Co.*, 198 Fed. Rep., 386, 395;
- Motion Picture Patents Co. v. Independent Co.*, 200 Fed. Rep., 411, 414, 416-17;
- National Electric Co. v. Telefunken Co.*, 209 Fed. Rep., 856, 864-5;
- Karl Kiefer Co. v. Unionwerke*, 218 Fed. Rep., 847, 855-6.

Assuming that no question is before this court except so far as concerns the Kane patent (claims 7 and 8 thereof)—all other issues having been disposed of by the decision of the Court of Appeals, and having referred to the license Exhibit D (Rec., Vol. I., p. 53) in support of our contention as to direct estoppel present in this case, a discussion of the contracts between the plaintiff corporation

and the Podlesaks and their assigns, defendant-respondent, is contained in Chapter A of an Appendix to this brief.

This Chapter of the Appendix will also necessarily be considered, if this Court decides to go into the question of the rights of the parties under the contracts, which were definitely settled by the Court of Appeals, and as to which no request for re-hearing was made. In other words, we have assumed that no question is now before this Court with respect to the interpretation of the contracts, but if, in spite of the reasons alleged by the petitioner for the grant of the writ of certiorari, the matter as to the interpretation of the contracts is referred to in their brief, we ask the Court to consider the said Chapter A of the Appendix. In this connection, we call attention to the language of the Court of Appeals' decision, 283 Fed. Rep., at page 87, as follows:

"Much stress has been laid on the asserted 'equities of the case.' We are, however, unable to recognize their pertinency. The contract between appellee and patentees was voluntarily executed. It fixed the rights of both parties. Any enhancement in the value of the patent was unquestionably mutually advantageous. Whether patentees were guilty of ingratitude to their former employers in selling the reserved rights in the patent to a business competitor of such employer, is beside the question. That certain rights were reserved by patentees is conceded. That such reserved rights as were assignable were sold to appellant is also conceded. As between appellant and appellee, then, the issue is solely and simply a question of the extent of the assignable rights so reserved."

It is understood that, if the court should reverse the decision of the Court of Appeals on the question of the estoppels which formed the basis of its opinion in favor of Respondent, the question of the validity of the claims 7 and 8 of the Kane patent in suit must be considered—to see with which of the two decisions of the Court of Appeals this court agree. We have, for convenience of the court, dis-

discussed in Chapter B of the Appendix the prior art as to said claims 7 and 8.

So, also, a discussion of the testimony introduced at the trial before the District Court on the question of priority between Milton and Kane is printed in said Appendix (Chapter C) one of the defenses being that Milton and not Kane was the inventor. It is particularly interesting as showing that Kane did not consider he had any invention in the subject-matter, which Plaintiff-Petitioner, now the owners of the Milton patent, considered eight years after the Kane application was filed to be of value sufficient to be utilized to prolong its monopoly and to destroy its own Milton patent, to destroy the intervening patents rights of Podlesak more than two years old, even though, in so doing, they were destroying the property of those who were in close contractual relation with them on this very subject matter.

We think a review of the evidence, in connection with our discussion of it, will satisfy the court, if it inquires into the question, that Milton, and not Kane, was the real originator of the new or improved design in question. No presumption to the contrary certainly can arise from the interference proceedings between Kane and Milton which have been reviewed, or from the issue of a patent to Kane as the result of those proceedings. Inasmuch as Milton's patent, for the same invention, was applied for and issued prior to Kane's, the assertion of priority of invention on behalf of Kane is practically an attack upon the validity of the earlier patent to Milton, and would seem to place upon Kane the burden of establishing such priority of invention beyond a reasonable doubt. We are satisfied that the proofs introduced on behalf of Kane cannot be held to meet any such requirement.

While the above quoted paragraph from the decision of the Court of Appeals seems to settle the question as to the equities between the parties under the contracts, and no reference was made thereto in the petition for certiorari, it may be that some contention will be raised before this

Court as to the bearing of the so-called "Manning-Van Deventer letter," as was done by the plaintiff-petitioner in both the District Court and the Court of Appeals. This is what is referred to in the above quoted language from the Court of Appeals, (*supra* 71) but is dwelt upon at length in Chapter D of the Appendix hereto.

CONCLUSION.

The application of the doctrine of equitable estoppel coupled with the laches of the plaintiff corporation precludes the holding of claims 7 and 8 valid.

(a) Assuming for the sake of argument that the subject-matter of these claims was originally claimed in the parent application (which is denied), it is a fact that, on February 12, 1912, the last semblance of any claim which might, by the greatest stretch of the imagination, be argued to include this subject-matter, was erased from said parent application; and it was not until October, 1914,—nearly three years after—that claims to the subject-matter were inserted for purposes of interference with the party, Milton.

During this period the invention had at all times been in public use by the plaintiff with, of course, the full knowledge of the applicant, Kane, so that it is clear there was an abandonment of the subject-matter and, therefore, an estoppel against the resurrecting of this subject-matter in the parent application, and a corresponding estoppel against the inclusion of the subject-matter in a divisional application not filed until 1915. This applies to Milton even, whose patent was *not* two years old when the Kane divisional was filed, but the invention of which had been in public use more than two years. Still more does it apply to the subject matter of the Podlesak patent which was more than two years old, when the claims to provoke interference were instituted.

Similar circumstances in a case of this character have recently been referred to by Judge Morris, District

Judge of the Third Circuit, in a decision reported in 290 Fed. Rep., 265, at page 675, wherein he states:

"The Court of Appeals had before it only the question of priority of invention and matters subordinate and pertinent thereto. This court is not so restricted. It may determine whether either of the patents is void on any ground. Walker on Patents, § 317. The defendants have not intimated that claim 1 of the Browning patent may not here be held void on the ground of abandonment, if the evidence so warrants. Assuming that claim 19 of Browning's original application and claim 19 of the Johnson patent, No. 946,442, were directed to the same subject-matter of invention, as held by the law examiner, yet Browning, by amendment, struck that claim out of his application April 4, 1911. His present claim 1 was not inserted until June, 1915. Under the circumstances then existing the public interest required that Browning should not be lacking in diligence. Were Browning's claim allowed to stand, the public will be deprived of the use of the invention thereof until 1939—29 years from the date of the Johnson patent. Browning's delay of over 4 years after April, 1911, before renewing his claim has not been explained. I think that by reason thereof he must be held to have abandoned it.

I am of the opinion that a decree adjudging claim 19 of Johnson patent, No. 946,442, void on the ground that the applicant was not the true and original inventor of the claimed invention, and adjudging claim 1 of Browning patent, No. 1,402,738, void on the ground of abandonment, should be entered."

So far as the circumstances are concerned, the above-entitled case is almost on all fours with the circumstances of the present case. The learned Judge did not refer to the Chapman-Winthroath case, but it is perfectly clear that, disregarding all the language of the Chapman-Winthroath case which was not pertinent to the exact state of facts as existing in that case, the reasoning is perfectly convincing leading to the conclusion that no liberties may be taken with a divisional case which could not be taken with the parent application.

Even assuming that in its broad sense a divisional application takes the place of the parent application, so far as the question of priority is concerned, and by taking the date of such parent case the Statutory bars would not apply; nevertheless, an actual abandonment of claims for subject-matter in a parent case for a period of more than two years after the issue of an intervening patent, or the springing up of an intervening right, creates an equitable estoppel against the restoration of claims to that subject-matter in the parent application, and to a greater extent even prevents the restoration of claims for that subject-matter in a divisional application.

After all is said, this is the reason of the ruling of the Supreme Court in the reissue cases. This court in interpreting the Miller Brass Company case in later decisions, has been careful to point out that it did not create a new Statutory bar, but that the decision was based upon the abandonment in the original application or patent of subject-matter, and that the applicant, after two years of intended delay or after an intervening right had accrued, could not restore claims for that subject-matter in a reissue application for the sole purpose of strangling development in the art. This ruling is especially applicable to a case such as the present where the result is not only to strangle development in the art, but to prolong the monopoly of the plaintiff to a period not contemplated by the patent Statutes.

(b) The procedure by which the plaintiff corporation manipulated the Kane-Milton interference, as is clearly explained in Chapter IV., creates an estoppel against their now prolonging the monopoly they had enjoyed under the Milton patent.

In this connection, it may be well to state that it has been well-settled that the mere prolongation of the monopoly by issuance of a later patent is not fatal to the validity thereof, when considered with respect to an earlier patent or similar subject-matter where the applications were pend-

ing concurrently. The present Chief Justice in the Ohio Brass case (*Thomson-Houston Electric Co. v. Ohio Brass Co.*, 80 Fed. Rep., 712, at page 724), before referred to, laid down the law on this point, which has been controlling ever since. Nevertheless, in that decision his Honor was careful to make an exception in the case of laches or fraud. Certainly, in the present case, laches of plaintiff corporation or Kane, the applicant, indicate not only abandonment, such as is referred to in paragraph (a), but also a wrongful prolongation of the monopoly as inhibited in the decision in the Ohio Brass case.

(c) The Kane-Podlesak interference, decided adversely to Kane, and accepted as final, as to structural claims for the same subject-matter as present claims 7 and 8, was certainly acquiesced in as to the lack of right of property in those narrow claims, and the estoppel, therefore, applies to the broad claims.

(d) The positive evidence that Kane abandoned this invention, as shown by the testimony quoted.

(e) Finally, his insertion of these broad claims for the purpose of overreaching his contract partners.

All these are instances in the career of this patent in the hands of plaintiff corporation, and any one of these reasons is sufficient to create an equitable estoppel against the claims being held valid.

Whether this Court holds that the language of *Chapman v. Winthroath* has been misconstrued by those courts which have followed it, to the extent of holding that a divisional application stands by itself and is governed by the same rules as to statutory bars as is the parent case, it is clear that a divisional application stands on no better footing than a parent application, and certainly the doctrine of equitable estoppel, laches, abandonment, etc., applied to the parent case are of double force when applied to a division.

In the Chapman-Winthroath case, the subject-matter claimed in the division had always been claimed in the

parent case, and had at no time been abandoned. Therefore, as the Chapmans filed their division within two years of the date of the intervening patent, and they had always shown in the parent case the attempt to claim such subject-matter, there was obviously no equitable estoppel against them.

The present case is far different with its actual failure to claim in the parent application and the testimony as to abandonment; with its abandonment of every semblance of a claim in the parent application for a period of nearly three years, during which plaintiff's and defendant's public uses were going on; with its failure for five years to file the divisional, and then only for the purpose of dominating its own; (Milton) patent, on which it had had a monopoly, and for the purpose of prolonging that monopoly; with its further attempt by way of interference with Podlesak to take away the property of parties with whom it had contractual relations under the subject-matter involved herein; and with its complete and positive acquiescence in the equitable estoppel, raised by the Court of Appeals of the District of Columbia on this score; and finally with its putting through the Patent Office in an *ex parte* proceeding these broad claims 7 and 8, prolonging its monopoly for many years, and destroying the property of the people with whom it had contractual relations under its former patents.

Thus it will be seen that, from the year 1909, continuously to the year 1916, neither Mr. Webster nor his company evidenced in any manner whatsoever that Kane, rather than Milton, was the originator of the newly designed magneto which they manufactured and sold through that period and advertised in his name, and also that there was no necessity for their acquiring the Kane application for protection against any patent that might be issued upon it, since the Webster Company already had an implied license or shop right to use the invention by reason of Kane's employment. Furthermore, even after acquiring the application there was no necessity for taking away Milton's claims and re-patenting them to Kane and attempting to

do the same thing with the Podlesaks claims. Obviously, the purpose for which the Webster Company acquired the Kane patent was for the use which it subsequently made of the Kane patent in the present suit, namely, to destroy the rights which, under license contract D, it had permitted the Podlesaks to retain, furthermore to prolong their monopoly of the subject-matter of both the Milton and Podlesak patents.

It is difficult to conceive of any equity which has not been violated by plaintiff corporation in connection with its procurement of these claims 7 and 8 of the Kane patent.

Respectfully submitted,

CHARLES L. STURTEVANT,

EUGENE G. MASON,

DAVID B. GANN,

For Defendant-Respondent.

APPENDIX

CHAPTER A.

The Podlesak Patents and License Agreements.

The Podlesak Patents.

On November 2, 1908, the two Podlesaks, being the joint owners of certain inventions and pending applications relating to improvements in magneto igniters for internal combustion engines (usually called simply "magnetos"), granted plaintiff's predecessor, Webster Manufacturing Company, the license to manufacture, use and sell devices embodying such inventions which appears at pages 39-44 of the record and constitutes Plaintiff's Exhibit A. Controversies having arisen between the parties under this license contract (referred to at various points in the voluminous pleadings but not discussed at length in the proofs) they were finally settled and entirely new contracts entered into on February 5, 1914. The first of these new contracts, constituting Plaintiff's Exhibit C* and printed at pages 48-52 (Vol. I.) of the record, granted plaintiff's immediate predecessor, the Webster Electric Company of West Virginia (successor to Webster Manufacturing Company, *supra*), an exclusive license under three patents which had in the meantime been granted to the Podlesaks upon the applications covered by the old contract. Neither of these three patents is involved in the decree appealed from, and we are not in any way concerned with plaintiff's rights under them, although the license contract will be later referred to for the purpose of contrasting it, and plaintiff's rights under it, with the second one of the two contracts entered

*Plaintiff's Exhibit B (Rec., 44-47), is an assignment between the Podlesaks themselves, fixing their relative interests in a large number of patents and pending applications jointly owned by them, and requiring no consideration here.

into between the parties on the same date. The patents covered by this contract Exhibit C related to a certain "tripolar" construction of magnetos, constituting a distinguishing and much exploited feature of plaintiff's magnetos, but not used by defendant.

The second of the two contracts above mentioned, constituting Plaintiff's Exhibit D and printed at pages 52-57 of the record, is headed "License Agreement—Shop Right," and purported to grant to plaintiff's predecessor a non-exclusive or shop-right license under certain additional patents and pending applications of the two Podlesaks, and included various agreements between the parties, one of which was a covenant on the part of the Podlesaks that they would not grant licenses to others to the inventions in question, although expressly reserving to themselves all rights under them.

The rights of both parties under this contract were expressly made assignable by the clause (bottom of page 56) reading:

"It is agreed that this agreement shall extend to and be binding upon the heirs, assigns, and legal representatives of the parties of the first part, and the successors and assigns of the party of the second part."

The Podlesaks subsequently assigned to Splitdorf Electrical Company, defendant-respondent here, the various patents covered by this license contract, and all of their rights under the contract; and The Webster Electric Company, of West Virginia, the licensee under the contract, subsequently assigned all of its interest in the contract to Webster Electric Company of Wisconsin, the present plaintiff-petitioner.

Plaintiff-petitioner relies upon its rights under the license contract thus acquired by assignment from its predecessor to support its bill and the decrees appealed from, while defendant-respondent relies upon its rights acquired by assignment from the Podlesaks (including title to the

patents themselves) as its defense to the bill so far as based on the Podlesak patents.

There was a further contract entered into between the parties on January 20, 1915, constituting Plaintiff's Exhibit E and printed at pages 57-60, Vol. I. of the record, but it related merely to an adjustment of the royalties upon a fixed sum basis instead of a percentage basis, and has no other bearing upon the rights of the parties under the two preceding contracts.

The License Agreement Exhibit D.

As clearly appears, not only by its title or heading and by its express terms, but as well by its repeated references to and contrast with the *exclusive* license granted by the other contract between the parties of the same date (Exhibit C), this license agreement, Exhibit D, was a mere non-exclusive or shop-right license, coupled with certain additional agreements between the parties. Thus, the second whereas clause of the contract, at the top of page 53, reads in part as follows (*italics ours, here and elsewhere, unless otherwise noted*):

"And whereas the party of the second part is desirous of securing *a shop-right and license* to manufacture, use and sell the inventions and improvements, described and claimed in abovesaid patents, and applications for patents."

The corresponding clause for the license contract, Exhibit C, on the contrary, reads as follows (Rec., 48):

"And whereas the party of the second part is desirous of securing *exclusive right and license* to manufacture, use and sell the inventions and improvements described and claimed in above said patents," etc.

So, with respect to the granting clauses of the two license contracts, that in Exhibit D (Rec., 53) reads as follows:

"The parties of the first part do hereby grant unto the party of the second part *a shop right and license* to manufacture, use and sell the inventions or improvements, and each and every one of them, described, set forth and claimed in said patents," etc.

Whereas the granting clause in Exhibit C (Rec., 48) reads:

"The parties of the first part do hereby grant unto the party of the second part the *exclusive right and license* to manufacture, use and sell the inventions or improvements, and each and every one of them described, set forth and claimed in said patent," etc.

The granting clause in Exhibit D is followed by the covenant (Rec., 53) that:

"The parties of the first part agree that they have good right and lawful authority to grant *said shop right and license*, and that they have not heretofore parted with any right, license or privilege *inconsistent therewith* and that they will not, while this *shop license* to the party of the second part is in force, give or grant shop licenses to others to make, use, or sell hereinsaid inventions, expressly reserving, however, the right to themselves to make, use and sell the hereinsaid inventions."

The corresponding clause of Exhibit C (Rec., 49) reads as follows:

"The parties of the first part agree that they have good right and lawful authority to grant *said exclusive license*, and that they have not heretofore parted with any right, license or privilege inconsistent therewith, and that they will not, while this *exclusive license* to the party of the second part is in force, make, use or sell said inventions, or grant, or give permission to, or encourage, others to do so."

Again, paragraph six of the license (page 55) reads as follows:

"Sixth: The party of the second part agrees that it will, except as hereinafter provided, use the devices manufactured under this *shop license* only in connection with, or for repairs to, the device manufactured under license which is covered by the agreement made on February 5, 1914, by which the parties of the first part gave to the party of the second part *the exclusive and sole right* to manufacture ignition devices covered by Patent No. 947,647, of January 25, 1910, Inductor Generators for Ignition Purposes, No. 949,483, issued February 8, 1910, Inductor Generators for Ignition Purposes, and No. 1,003,649, issued September 19, 1911, Inductor Generators for Ignition Purposes, and that whenever the devices covered by this *shop right and license* are made and sold and delivered not as a part of, or for use in connection with, the devices manufactured and sold under the aforesaid *exclusive license* dated February 5, 1914, then the party of the second part agrees that it will on the day of each and every report pay to the parties of the first part, jointly as a royalty or license fee, five per cent (5%) of all moneys or the equivalent thereof, which they may have received or that may be due them from the sales of or in exchange for the devices covered by this *shop right and license* sold and delivered during the preceding quarter. It is further expressly understood and agreed that the said devices manufactured embodying above improvements, or any of them, are not to be sold for less than a fair and reasonable price, based upon manufacturing and trade conditions."

In paragraph eighth on page 56 the agreement is again referred to as a "shop right or license," while paragraph ninth refers to it as follows:

"It is further agreed and understood that this *shop license* becomes terminated in the case or event the license given in the said agreement of February 5, 1914, becomes terminated by manner therein provided for."

This license agreement, Exhibit D, was not only a mere non-exclusive license or shop right by virtue of its express

terms, but it was so considered by everyone interested in it up to the time the present suit was brought. Thus, in June, 1915, plaintiff's predecessor, Webster Electric Company of West Virginia, jointly with the two Podlesaks, brought suit by the same counsel now representing plaintiff against Alamo Manufacturing Company (Vol. II., p. 69) and alleged (p. 71) that the Podlesaks "granted unto said Webster Electric Company a *shop-right license* to make, use and sell the invention described in said Reissued Letters Patent No. 13,878."*

So, in a letter of plaintiff's counsel to Henry J. Podlesak, in reference to said suit (Vol. II., 354, 355) plaintiff's counsel said:

"The *shop-right license* to the Webster Company alleges that the patents, including the bracket patent, are owned jointly by yourself and Emil."

And in the assignment of the license agreement itself from plaintiff's predecessor, the Webster Electric Company of West Virginia, to plaintiff (Vol. II., 705, 706), it is designated "*license agreement (shop right)*."

On September 4, 1915, the license agreements, together with the legal title to all of the patents covered by them, and all of the rights of the Podlesaks under the agreements, were assigned by them to Splitdorf Electrical Company, the defendant-respondent, and Sumter Electrical Company, jointly, by an instrument constituting Plaintiff's Exhibit F and printed at pages 60-65 of the record; and the Sumter Company subsequently assigned all of its interest in the patents and the license agreements to the Splitdorf Company by the several instruments found at pages 218-220 Vol. I. of the record, and pages 217-219 of Vol. II.

The Splitdorf Electrical Company, Respondent here,

*As hereinafter pointed out, this suit was originally brought, at the instance of the Webster Company and by its present counsel, in the name of one of the Podlesaks alone, the Webster Company not being considered even a necessary party to the suit.

thus became the owner of the entire, right, title and interest in and to all of the inventions and letters patent in question, subject only to the license agreements previously made by the Podlesaks with plaintiff's predecessor. The original assignment from the Podlesaks to the Splitdorf and Sumter Companies expressly recited these license agreements with plaintiff's predecessor, and the assignment and sale by the Podlesaks to the Splitdorf and Sumter Companies was expressly made subject to the rights of plaintiff's predecessor under such agreements, copies of the agreements being attached to the assignment and referred to therein. Said assignment constitutes Plaintiff's Exhibit F and is printed at pages 60-65, Vol. I. of the record. As will be there found, it first recites that:

"Whereas the parties of the first part are the present joint owners of certain inventions relating to inductor electric generators for internal combustion motor ignition, and of certain letters patent granted therefor as follows:"

And then recites the list of patents and pending applications under which plaintiff's predecessor was licensed, and then continues:

"And whereas said parties of the first part have heretofore granted licenses under said patents to the Webster Electric Company of Racine, Wisconsin, as evidenced by three certain written instruments dated respectively the 5th day of February, 1914, the 5th day of February, 1914, and the 20th day of January, 1915, of which true copies are hereto annexed and marked respectively Exhibits A, B and C; and

Whereas the parties of the second part having been nominated by F. C. Manning under his option dated August 20, 1915, and being his assignees thereof, are desirous of acquiring the entire interest in the aforesaid inventions, letters patent and applications, together with all rights to manufacture, use and sell said inventions *subject only to the licenses heretofore granted to the Webster Electric Company*, also the entire interest of the parties of the first part in the

aforesaid agreements with the said Webster Electric Company."

And then, finally, in the granting clause in the assignment (p. 62) it was expressly recited that:

"This assignment being subject only to the licenses hertofore granted to the Webster Electric Company."

As will thus be clear, the Splitdorf Electrical Company, defendant-respondent, by virtue of the several assignments referred to acquired all the rights and interest of whatsoever nature held by the Podlesaks at the date of their assignment, including the legal title to the patents and pending applications and all rights and interest of the Podlesaks under the license agreements with plaintiff's predecessor. It therefore remains simply to determine what the rights and interest of the Podlesaks were at the date of their assignment. Whatever they were, they passed to their assignees and are now vested in the defendant-respondent here.

Under the first of their two license agreements of February 5, 1914, with plaintiff's predecessor (Plaintiff's Exhibit C, Rec., 48) the Podlesaks had granted to plaintiff's predecessor "the *exclusive* right and license to manufacture, use and sell the inventions" covered by the three patents recited in the agreement, reserving to themselves certain royalties. What their assignees took under and in respect to those patents and that license agreement, therefore, was the mere naked legal title to the patents covered by the agreement, and the right to the reserved royalties.

In the case of the second license agreement, however, (Plaintiff's Exhibit D, Rec., 52), and the patents covered by that agreement, the situation was entirely different. The Podlesaks had not parted with their title to any of the patents or pending applications recited in it, nor with any of their rights or interest under said patents and pending applications, excepting the single non-exclusive shop-

right or license which they had granted to plaintiff's predecessor. They retained and held the legal title to the patents, and all of the rights arising out of ownership of the patents, subject only to the non-exclusive license which they had granted, and to their agreement not to license other persons. They had the full right, by virtue of their ownership of the inventions and patents, to use the inventions themselves and to exclude others (excepting their licensee) from using them, and but for their agreement with their licensee not to license other persons they might have granted an unlimited number of licenses to others for the use of the patented inventions. The express reservation, in the license agreement, of the right to use the inventions themselves was manifestly unnecessary and superfluous as a matter of law, since they retained and held that full right, by virtue of their ownership of the inventions and patents, without any such reservation. It was unnecessary and superfluous, just as was the covenant of the Podlesaks in their other license agreement of the same date, in which, after granting plaintiff's predecessor "the *exclusive* right and license to manufacture, use and sell the inventions" described and claimed in the patents covered by the license, they covenanted that "they (the Podlesaks) will not, while this exclusive license to the party of the second part is in force, make, use or sell said inventions or grant, or give permission to, or encourage, others to do so." (Rec., 49.) The draftsman of the two instruments, not being content with, or not fully understanding and appreciating, the legal effect of the instruments, sought to reinforce them with the covenant in the one case and the reservation in the other, to make clearer the intended rights of the parties under them.

Before making their license agreement with plaintiff's predecessor the Podlesaks admittedly had the full right to use the patented inventions themselves and to exclude others from using them. When and how, then, did they part with or lose such right to use the inventions themselves? Certainly not by the mere grant to plaintiff's predecessor of a

non-exclusive license or shop-right to use the inventions, for that grant left in them all of the rights they before enjoyed with the single exception of the right to exclude plaintiff's predecessor from using the inventions. Surely not by the mere additional agreement with plaintiff's predecessor that they would not license others to use the inventions, for that additional agreement merely deprived them of the right to grant such other licenses, and left them in the full enjoyment of all other rights which they previously held. If they did not part with or lose their original right to use the inventions themselves because of either of these provisions in the license contract, they certainly did not part with or lose such right because of any other provision it contained.

Suppose, for purposes of illustration, that the Podlesaks had been themselves engaged in the manufacture and sale of devices embodying their patented inventions prior to the making of the license contract with plaintiff's predecessor. Would they have been obliged to discontinue such manufacture and sale because of their grant to plaintiff's predecessor of a shop-right or non-exclusive license to use the inventions? If not, would they have been obliged to discontinue such manufacture and sale merely because of their additional agreement with plaintiff's predecessor that they would not grant similar licenses to others? Or because they authorized plaintiff's predecessor to bring suit in their names against infringers? Or because they agreed that plaintiff's predecessor might, if they should subsequently expressly consent in writing, grant certain nonexclusive licenses to others to use the patented inventions?

It seems too clear to admit of serious question, or to warrant extended discussion, that by none of the provisions of the license contract to plaintiff's predecessor, nor by virtue of all of them together, did the Podlesaks in any way part with or lose the full right which they before enjoyed to use the patented inventions themselves as an incident to and an accompaniment of their ownership of the inven-

tions and patents, and that their express reservation in the license agreement of the right to so use the inventions was in no way necessary in order to give them such right.

It is of course quite unnecessary to argue the proposition that the grant of a non-exclusive license under a patent, coupled with an agreement not to license others, is an entirely different thing, in legal effect, from the grant of an *exclusive* license under the patent. The latter confers upon the licensee all of the rights of the patentee under the patent, leaving in him only the naked legal title. Indeed, if it is an exclusive right to make, use and sell, for the full term of the patent, it transfers the entire monopoly and is in legal effect an assignment. The former divests the patentee of none of his rights under the patent, except his right to exclude his licensee from using the invention, and his right to license others to use it. He retains the full right to use the invention himself which he held before the grant of the license, and he retains the sole right to exclude all others, excepting his licensee, from using the invention. And these rights pass to any assignee to whom he may assign the patent and such assignee succeeds to the full enjoyment of them.

Plaintiff's argument to the contrary, which prevailed in the District Court, appears to us as unsound as would be the proposition that the owner of a farm who granted to a neighbor the right to pasture his cattle upon it, and agreed not to grant similar rights to others, would be debarred from pasturing his own cattle upon it; while the argument that the assignee of a patent, under the circumstances described, would not succeed to all the rights of his assignor appears as groundless as would the suggestion that a purchaser of the farm in question would not succeed to all of the rights of his vendor.

We know of no principle of law, and have been unable to discover any authority, upon which the decree of the District Court, holding that the assignees of the Podlesaks did not succeed to their full rights, can be supported; and

without such support plaintiff's case on the Podlesaks' patents must necessarily fail.

The Podlesaks had the full right to use the inventions themselves, and to transfer that right to others, as an accompaniment of their ownership of the patents, *because they had never parted with that right*; they had the right to use the inventions themselves for the further reason that they had expressly reserved that right in the license agreement; and they had the right to *assign* such reserved right to another because the rights of both parties under the license agreement *were expressly made assignable* by the clause of the agreement heretofore referred to.

When they expressly reserved, as they did, "the right to themselves to make, use and sell the hereinsaid inventions" (Rec., 53) and when the agreement further provided, as it did (Rec., 56)

"that this agreement shall extend to and be binding upon the heirs, *assigns* and legal representatives of the parties of the first part, and successors and assigns of the party of the second part,"

the legal effect of the instrument, so far as concerns the right of the parties of the first part (the Podlesaks) to assign their reserved right "to make, use and sell the hereinsaid inventions," was precisely the same as if the reservation itself had been of "the right to themselves *and their heirs, assigns and legal representatives* to make, use and sell the hereinsaid inventions."

Suppose, for purposes of illustration, that the Podlesaks, instead of assigning their patents and their rights under the license contract, had themselves engaged in the manufacture and sale of ignition devices embodying the patented inventions, and had invested a large sum of money and built up a large business and established a valuable good will—and had then died: Can it be doubted that the right to continue the use of the inventions, and to carry on such established business, would have passed to

their "heirs and legal representatives"? And if so, can there be any doubt that, while alive and themselves engaged in carrying on such business, they had the right to transfer it, and all of their rights pertaining to it, to another under the express provision of the license contract which made their rights assignable?

If the reserved right and all other rights of the Podlesaks under the agreement were not assignable, by virtue of the clause in question, then neither were the rights of plaintiff's predecessor assignable; and yet plaintiff holds all the rights it has under the license agreement, and under the patents covered by it, by virtue of an assignment from its predecessor, the original licensee.

No one has questioned the right of plaintiff's predecessor to assign and transfer its rights under the license agreement to plaintiff, and no one has questioned the fact that plaintiff holds all of the rights it has by virtue of such assignment. The assignment itself will be found at pages 705-709, Vol. II., and it is pleaded in the supplemental bill in this case, at page 187 of the record, as follows:

"And your orator further shows unto your Honors that on or about the 12th day of March, 1918, the said Webster Electric Company of West Virginia, in consideration of the sum of one dollar and other good and valuable consideration, by a written instrument dated the 12th day of March, 1918, which said instrument was duly filed for record and recorded in the United States Patent Office on or about the first day of July, 1918, *bargained, sold, granted, transferred, assigned, and conveyed* unto your orator, the said Webster Electric Company of Wisconsin all the property, property rights, business and assets belonging to the said Webster Electric Company of West Virginia, or in which the said Webster Electric Company of West Virginia was interested including all its copyrights, trade rights, trade names, patents, patent rights, devices and inventions of every kind and character owned by or in which the said Webster

Electric Company of West Virginia had any interest whatsoever, *and including any and all interest in and to and any or all benefits, and any and all claims and rights of action past or future arising out of any and all of the following contracts, among others, to-wit:*"

—and then follows a recitation of the three license agreements between plaintiff's predecessor and the Podlesaks.

The proof of plaintiff's title, under the foregoing allegation of its bill, is to be found in the stipulation printed at pages 217-218, Vol. I., of the record, which recites, in the second paragraph, that:

"Webster Electric Company of Wisconsin *acquired by purchase* the entire business, rights and obligations of Webster Electric Company, a West Virginia corporation, the plaintiff named in the original bill of complaint, by a written instrument executed on or about March 12, 1918."

It is of course well settled in the patent law that a license is personal merely, and not assignable, in the absence of express provision for assignability in the license itself. Therefore, but for the clause of the license agreement between the Podlesaks and plaintiff's predecessor which expressly conferred upon both parties the right to assign their respective interests under the license agreement, plaintiff's predecessor could not have assigned and transferred its rights to plaintiff; *and the same clause which conferred upon plaintiff's predecessor the right to assign and transfer its rights and interest under the contract conferred the like right upon the Podlesaks in respect to their rights and interest.*

It is therefore clear that by virtue of the legal effect of the instrument, independently of the reservation clause, as well as by virtue of the reservation clause and the subsequent clause conferring the right of assignability on both parties, the Podlesaks had the full right to use the patented inventions themselves and to transfer that right to others

as an incident to and accompaniment of the title to the patents covering such inventions. This is clearly the legal effect of the provisions of the instrument which have been considered, and the instrument contains no other provisions inconsistent with them, or which in any way modify the rights of the parties which have been discussed.

One of the additional provisions, found in paragraph second (Rec., 54), was the authority conferred upon the licensee to act as the agent and attorney of the licensors "for the purpose of joining them as parties complainant where necessary or desirable, in any suit which the party of the second part may wish to bring on account of the infringement of any of said Letters Patent," and the authority given the party of the second part as such agent and attorney to execute "any papers which may be necessary or convenient to the commencement and maintenance of any such suit." This provision manifestly did not affect any of the rights of the parties with which we are concerned in this case.

A further provision of the instrument, found in paragraph eighth (Rec., 56) was to the effect that

"The party of the second part, with the approval, in writing, of the parties of the first part shall have the right to grant shop-right or license for the manufacture, use and sale of devices embodying the invention described and claimed in said Patents No. 1,022,642 and No. 1,055,076, to makers of, or dealers in, gas engines, and gas engine accessories."

—but this provision manifestly conferred no rights upon the licensee in any way inconsistent with the original or reserved rights of the licensor. Indeed, it was a provision of little if any legal effect, since the rights of the licensee under it were entirely dependent upon the subsequent approval, in writing, of the licensors respecting any action of the licensee, and there was nothing in the instrument requiring the licensors to grant any such ap-

proval. In substance it was nothing more than a statement that if the parties should subsequently agree that other licenses of the kind described should be granted, then by virtue of such agreement they might be granted; otherwise not.*

It was the plain intent of the parties under the *first* of the license agreements (Exhibit C) that the licensees should have the *exclusive* right to make, use and sell the patented inventions, and to reinforce and emphasize that understanding there was inserted in the instrument the covenant on the part of the licensors (Rec., 49) that they would not "while this exclusive license to the party of the second part is in force, make, use or sell said inventions or grant, or give permission to or encourage others to do so"; and it was the equally plain intent of the parties under the *second* license agreement (Exhibit D) that the licensee should *not* have any such exclusive right, but should have a mere non-exclusive shop right or license, the licensors reserving to themselves all other rights excepting merely the right to grant further licenses, and to make clear and definite the fact that the licensors retained and reserved to themselves the right to use the inventions there was inserted the express reservation to that effect.

The legal effect of the instruments as drawn, and the intended rights of the parties, therefore clearly concur, and there would seem to be no ground whatever upon which the right of the Podlesaks to use the invention themselves, and to transfer that right to another, can be successfully controverted or questioned.

We submit, therefore, that by virtue of its ownership of the patents in question, and of all of the rights of the Podlesaks under the patents and under their license agreements with plaintiff's predecessor, the defendant-petitioner here has the full right and license to use the inventions in controversy, and that plaintiff had no cause of action whatsoever against it because of its use of them.

*Moreover, it related to only *two* of the *six* inventions and patents included in the license contract.

CHAPTER B.

Prior Art as to Claims 7 and 8.

If this court should reverse the decision of the Court of Appeals on the question of equitable estoppel, which formed the basis of their opinion in favor of defendant, then the question of the bearing of the prior art upon the claims sued on must be considered.

*Weber Patent No. 820,535.** This patent discloses an oscillating magneto of the same general character as that of the Kane patent in suit, and designed for the same use and in the same way as the Kane construction; and all of the parts which are, in the Kane construction, mounted upon and carried by the ignitor plug, are likewise mounted upon and carried by the ignitor plug in the Weber construction, with the single exception of the spring which operates to return the oscillating armature to normal position after it has been displaced therefrom and released.

The ignitor plug, the electrodes carried by it, the means for separating the electrodes to produce the spark, the oscillating armature and field magnets of the magneto, the means for oscillating the armature to produce a current in the circuit, and the circuit and its connections are each and all identical in principle and mode of operation with the corresponding parts in the Kane patent, differing, where they differ at all, merely in form, and being substantially the same, even in form, in many instances. Thus, the ignitor block or plug 3, with its extension 4 projecting into the cylinder 1, and the fixed and movable electrodes 5 and 24-25 mounted in said block, the circuit wire 11 having its end clamped between the nuts 9 and 10 on the outer end of the fixed electrode 5, and the crank arm 26 secured to the outer end of the movable electrodes 24-25, and having the spring 29 connected to it and the adjustable screw 27

*Vol. III., 771.

mounted in its outer end and secured in adjusted position by a lock nut, will at once be recognized as corresponding, even in form and arrangement, to the ignitor block or plug 8 with its extension 9, the fixed electrode 10 and movable electrode 26, the wire 11, having its ends secured between the nuts 12 and 13 on the outer end of the fixed electrode 10, the crank arm 27 secured to the outer end of the movable electrode 26, the spring 28 acting on said crank arm and the adjustable screw 29 carried by its outer end and secured in adjusted position by the lock nut, in the Kane construction. Likewise, the magneto proper, comprising the field magnets 17 and the oscillating inductor or armature 16 mounted upon the rock shaft 15 within the magnets 17 and their pole pieces 18, and the wire 22 connected at one end to one of the pole pieces 18 (by the screw 21) and at its opposite end to the ignitor block 3 and serving to complete the circuit, are each and all identical, excepting in details of form, with corresponding parts in the Kane patent.*

So, also, with respect to the remainder of the parts and their mode of operation. In the Weber construction the oscillating armature is yieldingly held in normal position, and returned thereto when displaced therefrom and released, by a single coiled spring 50 corresponding in purpose and function and mode of operation to the two coiled springs 31, 32 in the Kane construction. This coiled spring 50 surrounds a rod 39 whose left-hand end is detachably connected with an arm 40 projecting from the armature shaft 15, while its right-hand end is connected to a slide 33 mounted in a guideway carried by a bracket 31 secured to the engine cylinder 1. (See Figs. 7, 8 and 9; also the model of the Weber construction in evidence as Defendant's Weber Illustrative Apparatus No. 52). The coiled spring 50 which surrounds the rod 39 is se-

*With respect to the difference in the form of the permanent magnets 17 of the Weber construction and the permanent magnets 22 in the Kane construction, defendant in the present case follows Weber instead of Kane. (Vol. II. 51, 53, 55, 57.)

cured at its right-hand end to said rod and at its left-hand end bears against and is connected to the upturned end of the bracket plate 49. The slide 33 is provided near its right-hand end with a raised portion forming a shoulder 34 to co-operate with the plunger rod 35 (corresponding to the plunger rod 36 of Kane) whose opposite end is connected to a crank 37 upon the engine shaft, the revolution of which serves to reciprocate the rod 35. Located beside the slide 33 is a block 42 having an inclined or cam surface at its right-hand end. The end of the plunger rod 35 is sufficiently widened to not only engage the shoulder 34 on the slide 33, but to also co-operate with the inclined surface of the block 42. When the plunger rod 35 is reciprocated toward the left it carries the slide 33 with it to the position shown in Figure 8, moving the rod 39 to the left and rocking the armature shaft 15 in a corresponding direction and compressing the coiled spring 50, as shown. When the parts have been brought to the position of Figure 8 further movement of the plunger rod 35, as its widened end rides up the inclined surface of the block 42, will disengage it from the shoulder 34 on the slide 33 and release the latter, whereupon the slide and its connected parts will be instantly returned toward normal position by expansion of the spring 50, and their momentum will be such that it will carry them slightly beyond normal position, as indicated by the dotted lines in Figure 9, and cause the hammer arm 41 upon the armature shaft to contact with the end of the screw 27 carried by the crank arm 26 of the movable electrode, and rock said arm and electrode to the position shown by the dotted lines in Fig. 9, thereby separating the electrodes 25 and 5 and producing the spark, after which the slight retraction of the slide 33 and the parts moving with it to normal position, by the spring 50, will permit the spring 29 connected to the crank arm 26 to again bring the electrodes together. (See Weber Spec'n., p. 2, ll. 21-43.)

This is the identical mode of operation, and the same

combination and co-operation of parts, as in the Kane patent, the only difference being that in the latter the end of the reciprocating plunger rod 35 directly engaged an arm secured to and projecting from the armature shaft 15 and corresponding to the arm 40 secured to and projecting from the armature shaft 15 in the Weber construction, whereas in the latter the slide 33 and connecting rod 39 are interposed between the plunger rod 35 and the arm 40 on the armature shaft.

Coming now to a comparison of the disclosure of the Weber patent with that of the Kane patent with respect to the subject matter constituting the sole novelty of claims 7 and 8 of the Kane patent—the mounting of the magneto generator upon the ignitor block or plug so that the two may be removed and replaced as a unitary structure without disturbing the adjusted relation of the co-operating parts—the magneto generator in the Weber construction is mounted upon and carried by a supporting shelf or bracket 53 which is in turn secured to and carried by the ignitor block 3. This shelf or bracket 53 consists of a horizontal rectangular plate 53 of the general outline of the plate marked 13 in Fig. 1, the latter being a non-magnetic plate resting upon the plate or bracket 53. The plate 53 is provided with an upturned flange 54 at its inner end, by means of which it is secured to the ignitor block or plug 3, as shown in Figs. 1 and 3. The entire magneto generator is mounted upon the plate 13 resting on and secured to the plate or bracket 53 and carried by the latter, and the plate or bracket 53 is supported entirely by the ignitor block 3.*

The description of these last-mentioned parts is found at lines 17-36 on page 4 of the specifications and reads as follows:

“In order that the crank-arm 26 and the hammer-arm 41 may hold their relative positions with re-

*Here, again, defendant's construction follows that of Weber rather than that of Kane, since defendant's magneto is bodily removable from its supporting shelf or bracket (as in Podlesak) instead of being removable only in parts and piecemeal as in Kane.

spect to each other intact, I prefer to mount the plate or board 13 upon a horizontal bracket 53, the inner end of which is provided with a vertical flange 54, secured rigidly to the ignitor-block 3. The ignitor-block 3, which is such as are commonly used in engines of this type, may be sent, together with the magneto-electric machine and some of the parts connected therewith, and fitted to an engine in lieu of a similar ignitor-block provided with another sparking mechanism. The bracket 31, together with the parts mounted thereon, may also be sent from the factory ready to mount on an engine already set up. In such cases it is but necessary to connect the rod 39 to the crank-arm 40 after the brackets 53 and 31 are secured in place."

As will be understood from the foregoing, the described purpose of the arrangement shown is to enable the crank arm 26 of the movable electrode and the hammer arm of the armature shaft to "hold their relative positions with respect to each other intact," and this is accomplished by mounting the magneto generator upon a horizontal frame or bracket "rigidly secured to the ignitor block 3."

It is true, of course, that the shelf or bracket 53 is not formed *integrally* with the ignitor block, as in the Kane construction, but it is an elementary proposition of the patent law that two parts rigidly secured together are the mechanical equivalent of the same parts formed integral with each other, and *vice versa*, where they perform the same function, so that there is no material difference between the Weber and Kane constructions in this respect. The former would therefore seem to furnish a complete response to the subject matter of the two claims of the Kane patent under consideration, and a substantial anticipation of them.

The two criticisms of the Weber disclosure offered by plaintiff's counsel and expert in their effort to distinguish it from that of the Kane patent, are, first, that it is not clear from the specification and drawings of the

Weber patent, how the vertical flange 54 of the horizontal shelf or bracket 53 is "secured rigidly to the ignitor block 3," and, second, that the spring 50 for returning the armature to initial position after it has been moved therefrom and released by the plunger rod 35 is not mounted upon and carried by the shelf or bracket which carries the magneto generator, as is the case in the Kane construction.

With respect to the first of these criticisms, it would seem unnecessary that the specification should describe how the flange 54 of the supporting shelf or bracket 53 is "secured rigidly to the ignitor block 3," for it manifestly might be done in a variety of ways—by welding or riveting, or by bolts or screws, as admitted by plaintiff's expert, Mr. Webster, at page 782 of the record. But plaintiff assumes, and contends, for the purposes of its criticism, that the drawings indicate that the flange 54 is secured to ignitor block 3 by the two screw bolts whose heads are shown in Figures 1 and 2, and by these alone, and that these bolts also secure the ignitor block to the cylinder wall; and they argue, from this assumption, that when the bolts in question are loosened and removed, for the purpose of removing the ignitor block from the cylinder, the shelf or bracket carrying the magneto will be released and become detached from the block, and the unitary character of the structure be thereby destroyed. But this assumption and conclusion would seem to be not only unnecessary and unwarranted, from anything disclosed in the drawings of the Weber patent, but to be inconsistent with the description of the purpose of the described arrangement given in the specification, and reading:

"In order that the crank-arm 26 and the hammer-arm 41 *may hold their relative positions with respect to each other intact*, I prefer to mount the plate or board 13 upon a horizontal bracket 53, the inner end of which is provided with a vertical flange 54, *secured rigidly to the ignitor-block 3.*"

If the horizontal shelf or bracket carrying the magneto were to be released and fall away upon the removal of the ignitor block from the cylinder, as plaintiff assumes, the relative positions of the crank arm 26 and hammer arm 41 with respect to each other manifestly could not be "preserved intact" as described in the specification, for the crank arm 26 is secured upon the end of the rock shaft 24 of the movable electrode 25, which rock shaft is mounted in and carried by the ignitor block and plug, whereas the hammer arm 41 is carried by the armature 15 of the magneto generator which is secured upon and carried by the horizontal shelf or bracket 53. In order that the relative positions of the crank arm 26 and hammer arm 41 may be "preserved intact" it seems clear that the shelf or bracket carrying the magneto generator was not intended to be detached from the ignitor block 3 as an incident to the removal of the latter from the engine cylinder.

It will hardly do to assume that the quoted statement of the specification simply means that the described provision is for the purpose of enabling the crank arm and hammer arm "to hold their relative positions with respect to each other intact" *when the parts are secured to the engine cylinder* and in operation, for in that case there would be no necessity of mounting the supporting shelf or bracket on the ignitor block at all—it might just as well be secured to the cylinder independently of the ignitor block.

That the supporting shelf or bracket was intended to be "secured rigidly to the ignitor block" and removable therewith as a unitary structure would seem to be further evidenced by the additional reference to these parts in the same quoted paragraph of the specifications, to the effect that:

"The ignitor-block 3 * * * may be sent, together with the magneto-electric machine and some of the parts connected therewith, and fitted to an engine

in lieu of a similar ignitor block provided with another sparking mechanism."

This language would seem to indicate that it was contemplated that the ignitor block and the magneto-electric machine could be sent out as a unitary structure, to be "fitted to an engine in lieu of a similar ignitor block provided with another sparking mechanism."

With respect to the alleged insufficiency of the disclosure or description of the particular means by which the flange 54 of the supporting shelf or bracket is "secured rigidly to the ignitor block 3," it is to be noted that the specification contains no description of the means for securing the ignitor block itself to the engine cylinder, and that in this respect the Weber patent corresponds to the Kane patent itself, the latter containing neither description nor disclosure of the means employed for that purpose. The drawings of the Weber patent (Fig. 3) do show a screw bolt passing through the upper portion of the ignitor block 3 and evidently forming part of the means for securing the block to the cylinder. Plaintiff asserts that this bolt alone would be insufficient for the purpose, and that the two bolts shown passing through the flange 54 and lower part of the ignitor block would also be necessary in order to firmly secure the block to the cylinder wall. This may or may not be the fact, depending upon the tightness and rigidity of the fit of the plug 4 of the ignitor block in the opening in the engine cylinder;*

*It is a common practice to secure magneto generators of this general character to the cylinder wall with a single bolt. In the samples of Defendants' Type B generators, which plaintiff has introduced in evidence in this case as its Exhibits Nos. 69 and 79, the ignitor plug and all of the parts carried by it are secured to the cylinder wall by a single bolt passing through a hole or recess in the upper portion of the flange of the plug, in the same location as the upper bolt in the Weber disclosure. This is clearly shown in plaintiff's diagram of Defendants' Device Type B on page 53 of Vol. II., where the hole or recess is lettered U. In Defendants' Type A device the parts are secured to the cylinder by a single bolt passing through the casting at the right of the plug, as found in Plaintiff's Exhibit No. 44. A single bolt is amply sufficient, in all of these cases, to firmly secure the parts to the cylinder.

but even if the two lower bolts passing through the flange 53 did constitute part of the means, and an essential part of the means, for securing the ignitor block to the cylinder wall, it does not necessarily follow that the removal of these bolts would cause the supporting shelf or bracket to be released and become detached from the ignitor block, for that would only be true in event such bolts constituted the sole means for securing it to the ignitor block, and there is no basis for this assumption, as we have seen.

Plaintiff calls attention to the fact that the holes for the three bolts shown in Fig. 3 of the Weber drawings also appear in Fig. 2, which is a view of the opposite side of the block from that in Fig. 3, thus showing that the holes in question pass all of the way through the block, from which plaintiff argues that all of the bolts therefore presumably passed entirely through the block and entered the wall of the cylinder. But as explained by Mr. Carter (Vol. I., 700) the holes in the block would undoubtedly, as a matter of machine practice, be bored all the way through the block, whether all of the bolts were intended to pass entirely through the block or not. He also calls attention to the fact that the hole in the block in which the pin 30 (Fig. 1) is seated, is shown in Fig. 2 (as well as the bolt holes) although the pin 30 of course does not pass through or beyond the block, and there is no occasion, excepting as a matter of machine-shop practice, for having the hole in which the pin is seated pass entirely through the block.

In view of the incomplete and imperfect, if not wholly insufficient, disclosure in the Kane patent itself of the subject matter of claims 7 and 8 of the patent, as heretofore explained, it would seem that plaintiff's criticism of the disclosure of the Weber patent, in the respects just considered, should not be given the weight plaintiff seeks to have accorded to it.

With respect to plaintiff's other criticism, that the spring 50 which returns the armature to initial position,

after it has been moved therefrom and released by the plunger rod 35 is not mounted upon the supporting shelf or bracket which carries the magneto generator and which is itself carried by the ignitor plug, it is clear, of course, that this fact does not affect in any manner the mode of operation of the parts or the results accomplished, which are identical with those of the Kane construction; while so far as may concern any necessity for adjustment, due to the fact that the spring and the rod and slide with which it is connected are mounted upon a separate bracket 31, such adjustment would have relation only to the timing of the disconnection of the plunger rod 35 from the shoulder 34 on the slide 33, and the same provision for such adjustment is present in and required by both the Weber and the Kane constructions, as heretofore explained. The relation of *these* parts is not "preserved intact" in either Kane or Weber.

The difference between the Weber construction and the Kane construction in respect to the mounting of the armature-restoring spring or springs—the fact that in the Weber construction such spring is mounted on a support independent of the bracket which carries the magneto generator whereas in the Kane construction the springs are mounted upon the frame of the magneto and carried by its support—is due merely to the fact that Weber disclosed one old type of magneto and Kane disclosed another. There was no novelty whatever in Kane's "self-contained" type of magneto, in which the springs in question were mounted precisely as in Kane's construction. Such types of magneto are disclosed, for instance, in the Hennig patent, No. 916,312 (Figs. 2 3 and 4), and in the Milton patent, No. 1,053,107, the latter patent (the application for which was filed January 30, 1909), illustrating the commercial construction of magneto which was being employed by plaintiff prior to the design and adoption of the construction disclosed in the Kane patent.

If either the Hennig or Milton type of magneto were

mounted upon the ignitor block, as taught by Weber and as disclosed in his patent, we would have a full response to the terms, as well as the substance, of Kane's claims, and plaintiff's criticism of the Weber disclosure, now under discussion, would disappear. (Carter, Rec., 697, 698.)

Surely, in view of Weber's disclosure, it could not be held to constitute patentable invention to merely mount one old form of magneto, instead of another, upon the supporting shelf or bracket provided by Weber on the ignitor block for that purpose—particularly when such substitution of one old form of magneto for another would involve no change whatever in mode of operation or result accomplished.

We think the disclosure of the Weber patent amounts to a substantial anticipation of the claims of the Kane patent now under consideration, in and of itself, and without the assistance of any other prior art; but if the difference between the two in respect to the mounting of the armature-restoring spring can be held to be in any way material, such difference disappears when we consider the other common forms of magneto generators in the prior art which have been referred to.

It is to be further noted, in this connection, that claims 7 and 8 of the Kane patent, unlike all of the preceding claims of the patent, are broad and general with respect to their description of the parts that are to be mounted upon and carried by the ignitor plug, and can derive no support whatever from the particular form or character of the parts disclosed in the drawings and described in the specification.* Thus, with respect to the magneto generator, it is to comprise simply a "rotor and stator and generating winding." With respect to the electrodes, they are to be simply "a pair of relatively movable make-and-break spark electrodes adapted to be located

*Nor would they be infringed by defendant if so restricted, defendant's device being of different design and construction, in detail, from the Kane device and clearly not infringing any of the more limited claims of the Kane patent.

within an engine cylinder." With respect to the spring or springs for returning the armature to initial position after it has been moved therefrom and released, the claim simply calls for the employment of "spring means tending normally to hold said rotor in such position," which spring means may of course consist of a single spring, as in Weber, or a plurality of springs, as in Kane. The remaining parts or elements which are to be mounted on the unitary support carried by the ignitor plug are described broadly as "mechanism whereby the movement of the rotor effects the separation of said electrodes at a predetermined point in the movement of the rotor," which not only clearly includes the Weber mechanism in terms, but the Weber construction and the Kane construction in this respect are substantially identical. The remaining elements of claim 7 are "conductors for carrying electric current from said generating winding to said electrodes," which are of course present in Weber, "and engine driven means adapted to oscillate said rotor against the action of said spring means and then to release it," which means are substantially the same in mode of operation and result in both Weber and Kane.

As originally filed the specification of Kane's application contained the following statement (Vol. II., 506), respecting the scope of the invention:

"While I have herein shown the invention applied to one specific form of generator or magneto and have to an extent shown and described the details of construction of such magneto or generator, it will be apparent that the invention may be applied by those skilled in the art to any type of magneto or generator whether of the oscillating type of armature or inductor or whether of the constantly rotating type of armature or inductor. It will also be apparent that the invention may equally be applied to magnetos or generators for furnishing electrical ignition whether the armature or moving part is of the wound type instead of the laminated metal or whether the field be of the ordinary form of winding."

And the specification of the patent as issued concludes with the statement:

"While I have illustrated and described the preferred form of my invention, I do not desire to be limited to the precise details and arrangements set forth, but desire to avail myself of such variations and changes as may come within the scope of the appended claims."

Claim 8 is substantially the same as claim 7 in respect to the matters just considered, and it is therefore clear that unless the claims can be sustained broadly for the mere mounting of the magneto generator upon the ignitor plug they present no patentable novelty. We respectfully submit that, in view of the disclosure of the Weber patent, there was nothing novel in the broad idea of mounting the magneto generator upon the ignitor plug, and that the claims are substantially anticipated by that patent.

Wattles Patent No. 909,264.

This is another patent in the record disclosing the so-called "unitary" construction, in which the magneto generator is supported entirely by the ignitor plug. This fact so clearly appears from the drawings of the patent that no description or explanation seems necessary.

The International Harvester Company, for whose use plaintiff got up the construction disclosed in the Kane patent, was trying out the Wattles device at the same time, and Mr. Waterman of that company, called as plaintiff's witness, testified to the unitary construction of the device. Thus, at page 238 of the record he testified:

"Q. How was that Wattles magneto fastened on the cylinder?"

A. It is a good while ago, but if I remember correctly—if my recollection is correct—the plug was removed completely from the engine, and the Wattles

magneto was inserted in its place. The plunger of the Wattles magneto was inserted in place of the plug.

Q. Is it not true, Mr. Waterman, as you now remember, that in that Wattles construction the magneto was mounted on the plug?

A. No, it was not mounted on the plug. No, sir. The plug, I am quite sure, was removed completely, and the Wattles magneto was inserted in the opening which was vacated by the plug; that is, the Wattles magneto was operated by the compression of the cylinder; a plunger was inserted in place of the plug.

Q. Now, disregard for a moment the manner in which the compression of the engine was operated. Is it not a fact that in the Wattles magneto the generator proper and the plug, with its electrodes, were connected together in one structure, and capable of being mounted on the engine as a whole, and taken off as a whole?

A. Yes, sir. *The Wattles magneto was a complete unit.*"

There is in evidence a Wattles magneto (Defendant's Exhibit Wattles Magneto No. 53) of slightly different form from that disclosed in the above patent but embodying the same "unitary" construction. (Rec., 702, 704.)

There was manifestly nothing broadly new, therefore, in the "unitary" idea of the Kane construction, and as that idea constitutes the sole novelty of the subject matter of claims 7 and 8 of the Kane patent, we submit that the claims are destitute of patentable novelty and invalid.

That the mounting of the magneto upon the ignitor plug or independently of it is a mere matter of choice or design and not of *invention* (as Mr. Kane testified he considered it at the time his application was filed) is further evidenced by the fact that the International Harvester Company, for whose use and because of whose complaints the "unitary" construction of the Milton and Kane patents was designed, largely abandoned such unitary construction after a few years' use of it and reverted to an independent

mounting of the magneto upon the engine cylinder and a connection of it with the movable electrode in the ignitor plug very similar to that employed by it with the original form of Milton magneto shown in Milton's patent, No. 1,053,107. (See testimony of Henry J. Cox, magneto superintendent of the International Harvester Company, at pages 713-14 and 719-720 of the record, and the cuts on page 6 of his company's catalogue, Defendant's Exhibit No. 51, produced by him and reproduced at page 745, Vol. III. of the Record.

CHAPTER C.

Milton, Not Kane, the Real Originator of the Subject Matter of the Claims in Controversy.

The proofs in support of Kane's claim to priority or originality, as against Milton's, are largely founded upon the so-called sketch (Plaintiff's Exhibit No. 17), which Kane claims to have made at his home on Sunday afternoon, April 11, 1909. In the absence of satisfactory and convincing proof that Kane made this sketch at the time and under the circumstances claimed, and that it was in fact an original sketch made for the purpose of placing on paper and disclosing original ideas of his own, rather than a copy or reproduction of a similar drawing already in existence, his whole case falls to the ground, for there is nothing in the remaining evidence produced in his behalf that is in any way inconsistent with Milton's claim and testimony to the effect that all that Kane did was done under Milton's immediate direction and supervision and was a mere carrying out of his ideas and instructions. The additional drawing (Plaintiff's Exhibit No. 18) which Kane claims to have made and completed within a few days following the making of the sketch at his home on Sunday afternoon was admittedly made at the Webster plant in the regular course of work, and, excepting for Kane's unsup-

ported denial of the fact, may well have been made under Milton's immediate direction and instruction and with his assistance, as Milton claims.

Moreover, the construction disclosed in the latter drawing, Exhibit No. 18, is very different, indeed, from anything disclosed in or suggested by the sketch Exhibit No. 17. It is not a mere working out and more complete disclosure of ideas incompletely and imperfectly disclosed in the sketch, but is a disclosure of a very different construction, and one which is, in many respects, inconsistent with the disclosure of the sketch. Practically the only feature in which the two constructions have anything in common is that in both the magneto is shown as supported upon the ignitor block or plug.

Moreover, the so-called sketch, Exhibit No. 17, does not disclose the subject matter of a single one of the claims of Kane's original application, nor the subject matter of a single one of the claims of his divisional application; nor, indeed, the subject matter of any of the claims of his patent as issued, unless, possibly, in a vague way, the subject matter of claims 7 and 8, it not being clear (and the record not otherwise showing) whether the magneto-supporting member in the sketch is formed integrally with the plug or separately therefrom and bolted thereto by the same bolts which secure the plug to the engine cylinder, in which latter event it would be subject to the same criticism which plaintiff offers (without warrant, we think) to the construction disclosed in the Weber patent heretofore considered.

Kane's story (Rec., Vol. I., p. 244) is that Mr. Webster came to him and told him of the troubles they were having with the Milton magneto, and asked him if he could not do something to remedy them; that his father spoke to him on the same subject the following morning (Sunday) and that on the afternoon of the same day he sat down and made the sketch in question and showed it to his father; that the next morning (Monday) he showed it to Mr. Webster and the two went to the office of the Harvester Com-

pany and showed it to Mr. Cavanaugh; that immediately thereafter, the same afternoon, he set about making the drawing, Complainant's Exhibit No. 18; and that this was followed up immediately with the building of a sample magneto, which was completed within a couple of weeks and tried out and found satisfactory—all without Mr. Milton having anything whatever to do with the matter, excepting to offer a criticism of Kane's second drawing when Kane showed it to him.

The whole story is highly improbable, and we think incredible, when the positions and relations of the parties and the attendant circumstances are considered; and it bears evidence of its falsity.

In the first place, with respect to the so-called sketch Exhibit No. 17; Kane calls this a "rough sketch," but it very much more like a *tracing*, on tracing paper, of a scale or dimension drawing, and traced from such a drawing. It is clearly not a "study" or "layout" drawing, such as a draftsman endeavoring to place on paper a new idea invariably makes. It bears little evidence of any alteration—any erasures and repenciling—in the course of its evolution, as invariably occurs in the working out of any new ideas upon paper, but on the contrary appears to be a clean, clear-cut, unaltered tracing of a well-defined previously made drawing.

It is not only not a sketch, or a study or layout drawing of a new idea, but it is not made upon paper which would have permitted of the erasures and alterations usually incident to such drawings. On the contrary, it is made upon tracing paper such as draftsmen never use for such purpose, but solely for such purposes as those described by the draftsman Kroeplin, on page 681 of the record. Kane was a draftsman (had graduated from Lewis Institute) and he would never have attempted to work out an original sketch or study drawing on any such paper. He offers no explanation whatever as to why he happened to have this tracing paper at his home, and no drawing paper or other paper more suitable for his purpose.

Furthermore, the so-called sketch appears to have been made to scale, or to have been traced from a scale or dimension drawing, and it will be noted that the magneto is turned up into what is referred to in the record as "vertical" position in order to clear the carburetor of the engine shown immediately at the left of the magneto*—an arrangement different from that employed either with the old Milton magneto or in the drawing of April 14th (Exhibit No. 18) and the magnetos following it. Now, if Kane's story is true—if he just sat down that afternoon and on the spur of the moment sketched off his new and original design, as he claims he did (Rec., 244, 272)—he had no drawing or other data before him from which to get the dimensions and relations of the parts, which is further evidence, we think, of the fact that **Exhibit No. 17 was not** made as an original sketch of a new design, but was either traced from an existing drawing or made with knowledge of such a drawing.

The ignitor opening in the wall of the cylinder and the carburetor referred to were in fixed and unchangeable relation to each other, so that to mount his magneto on the ignitor plug, and at the same time clear the carburetor, the magneto in Exhibit No. 17 had to be placed in vertical position. When the further drawing, No. 18, was worked out, however, the axis of the armature shaft was shifted away to the right, as compared with Exhibit No. 17, and the other parts correspondingly relocated in the new and very different design disclosed in this drawing, so that the magneto could be mounted in horizontal position, as shown, and as was always done in practice with the magnetos thereafter built.

The exhibit sketch thus bears inherent evidence that it was not made at the time and in the manner described by Kane, but was traced or reproduced from a previously made drawing; and it is altogether more reasonable to believe that it was traced from some study drawing or sketch which had been developed at the Webster plant, un-

*See cuts of engine, Vol. II., pp. 13, 15, 17.

der Milton's direction, as claimed by the latter, than that it was an original sketch made by Kane at his home on that Sunday afternoon, as he claims. If not actually traced from some previously made drawing, it was evidently made with such knowledge of an existing drawing that the draftsman was able to place it directly on paper without alteration of any kind.*

The only corroboration whatever of Kane's claim to having made Exhibit No. 17 as an original sketch at his home on the Sunday afternoon in question is the testimony of his father, Maurice Kane, and when the testimony of the latter is analyzed it will be found to fall far short of any distinct corroboration of his son's claim to having made the exhibit as an original sketch at the time and under the circumstances described. The fact that young Kane had the tracing in question at his home on that Sunday afternoon and showed it to his father, as the latter testified, need not be denied or questioned; but that it was an original sketch, made then and there, as a study or layout of original ideas, and not a tracing made elsewhere from a previously made drawing, or at least made with knowledge of a similar existing drawing, is far from established by anything that Mr. Kane, Sr., says:

Thus, being examined by plaintiff's counsel respecting the troubles experienced by the International Harvester Company with the old Milton magneto, he testified (Rec., 295):

"Q. Now, did you ever have any talk with your son Joe about doing anything, or anything that he had done to overcome these troubles in the early equipment?

A. I did, sir. The complaints were so many that I called his attention to it, and said that unless something was done, from the reports that we had, we would have to quit—

*As hereinafter shown, it corresponds very much more closely to a design that Chiville had previously worked out at the Webster plant under Milton's direction (Vol. II., 576) than it does to the drawing Exhibit No. 18 and the magnetos built after the latter.

Q. Have to quit what?

A. Quit putting those out, those magnetos.

Q. Now, what developed as the result of that conversation between you and Joe?

A. I asked Joe why he did not do something at the factory to remedy that, and I remember very well he said, well, that was not his part of the business.

Q. Now, did he talk with you at any time later about anything he had done to overcome the troubles and the difficulties?

A. No, but at that particular time, he went to work right away to make drawings.

Q. How did you know that?

A. He showed them to me.

Q. What did he say about them, or what did you say, at the time those drawing were shown to you?

A. Well, I really did not know very much about them, but I asked him to submit those to Mr. Webster, which he did.

Q. I will ask you to look at this paper, marked Plaintiff's Exhibit No. 17, and ask you whether you recognize or can identify it?

(Exhibit 17 shown witness).

A. Yes, sir; that looks like the drawing that he showed me.

Q. Did he afterward show you other drawings relating to the same general subject matter?

A. I do not remember seeing anything else except this original drawing, that he made at home.

Q. Did you see him at work on this drawing?

A. Oh, yes.

Q. Did he talk with you, or explain to you what this drawing showed, or what his idea was in making it?

A. I think he did, in a general way, but I do not think he went into details.

Q. Can you recall and can you state now what he said to you about this drawing, or what it showed, at that time?

A. Yes; I remember the change that he said he made, mounting it on the spark plug, or whatever you call it, instead of on the side of the engine, that that was his plan.

Q. What else did he say about his plan, or about the drawing?

A. I do not think he went into details with me at all, sir."

And at pages 304-305, on cross-examination:

"Q. I understood you to say, Mr. Kane, that when your son produced this drawing—or you saw him making the drawing?

A. Yes, sir.

Q. That Sunday afternoon, in the house. Did you ask him what he was doing, while he was making that drawing?

A. Why, I do not remember, sir, but I presume I did. At least I knew what he was doing.

Q. Did he tell you?

A. Yes, undoubtedly. I saw him at work.

Q. Don't you know whether he did or not? You have no recollection?

A. Oh, no.

Q. You say he did not explain to you that drawing in detail at that time?

A. I am quite sure he did not, sir. I would not understand it very well, if he did, so there would not be any—

Q. Why wouldn't you understand it?

A. Because I did not know much about the engine business, or the magneto.

Q. Didn't you know enough about the engine business and the magneto to be able to read a drawing when it was shown to you, and understand, with the aid of his explanation, what it was all about?

A. Oh, I think I would, sir.

Q. Yes.

A. Yes.

Q. You did not take enough interest in what your son was doing to find out in detail what was shown in that drawing, did you?

A. No, sir, I did not know enough about it to take very much interest in it."

And on page 306:

"Q. So you did not know what the structure was that he illustrated in the drawing on that date, on that Sunday afternoon that he made it?

A. Only in a general way, sir.

Q. Well, what way? What did you know about it?

A. That he was trying to remedy the difficulties we were having with the magneto that we were then using.

Q. And you did not ask him how he did that, or remedied that difficulty, did you?

A. Oh, I presume I did, but I do not remember just now the—

Q. Now, when did you first learn what you now say your son had done on that Sunday afternoon, in detail, and with regard to what it was that he had done? How soon after that did you learn about it?

A. I really do not know, sir. I could not tell you.

Q. Well, can't you give me some idea about how soon it was? I do not ask you for the precise time.

A. I know they went to work at it right away, I remember that, and produced the magneto, and as I have already stated, I saw it in operation."

And on page 307:

"Q. Do you have now any present recollection as to when it was when you first learned what your son had done on that Sunday afternoon in detail?

A. No, I could not state, sir, exactly when that--

Q. I am not asking you to state it exactly, and I will say again, now, can you state it approximately or as near as you can? And if you have no recollection, you can say so.

A. I know that the thing was adopted, and very soon after this first drawing was made.

Q. That is what you said before. Pardon me.

A. That they started in to make patterns, and the complete magneto was produced very soon after.

Q. Now, I am not asking you as to when they adopted it, or when it was adopted by the International Harvester Company, but when did you first learn, as near as you can now state, what it was that your son had done, on this Sunday afternoon, in detail?

A. I do not think, sir, that I ever went into it in detail at all.

Q. Well, how far did you go into it?

A. Oh, just in general way, looking it over.

Q. What do you mean, by 'general way'? How much did you learn about it, when you looked it over in a general way?

A. Well, I could see that it was attached to the engine.

Q. Is that all?

A. —Different from the other.

Q. Different than the other?

A. Yes, sir.

Q. Is that all you ever learned about it?

A. Substantially."

And at pages 310-311:

"Q. Didn't you know anything more about this supposed invention of Joe's at the time you went to the patent lawyer, than that it had something to do with the way of fastening the magneto to the plug on the engine?

A. That is the only thing that I remember, sir.

Q. And that is all the knowledge you had of this invention of Joe's, when you went to see the patent attorneys with him?

A. I think that is substantially right."*

* * * * *

"Q. Now, don't let us get confused. Let us see if we get it straight: so that at the time you went to see the patent lawyers with Joe, all you knew about this invention was that it was a means or some way of securing the magneto and plug to the engine; that is right, isn't it?

A. That was the general idea that I had.

Q. And that was all you had?

A. No, I wouldn't be sure of that.

Q. What more did you have?

A. I don't remember anything more than that.

Q. When did you next see this drawing, Exhibit 17—is that it—after you saw it on Sunday afternoon when your son was making it; when did you next see it?

*It will be remembered that this feature of Kane's alleged invention was not mentioned in the patent application that was prepared as a result of this interview.

A. I think it was when they had the interference case up, sir; I have no recollection of seeing it at any other time.

Q. Did you look at this drawing with any degree of care on that Sunday morning when he showed it to you?

A. No.

Q. You just looked at it casually, did you?

A. Just in a general way, that is all, sir."

Mr. Kane never saw the drawing, Exhibit No. 18, which his son made at the Webster plant a few days later (Rec., 273), but he saw the first magneto that was built in accordance with the new design (whether Milton's or his son's) and witnessed the first test of it on an engine, as he naturally would at the head of the experimental department of the Harvester Company regardless of his relation to his son, and doubtless saw many subsequent magnetos of the same construction, and his testimony throughout shows that he was assuming, from this later knowledge of the magnetos, that they were the same in construction as that shown in his son's sketch, Exhibit 17, whereas, as a matter of fact, they were very different, as heretofore pointed out. Thus, at pages 297-298 of the record, he testified:

"Q. Did you see presently an equipment made in conformity with Joe Kane's drawing or plans, as he discussed them with you?

A. Yes. Sometime later I saw the magneto made in conformity with those drawings in operation at the Webster factory.

Q. What do you mean, when you saw it in operation?

A. According to the memorandum here (indicating book) I saw that on May 13, 1909.

Q. What memorandum do you refer to? Will you read it?

A. It is headed 'Magnetos: The late style put on a 6-horse power worked well. Will not work on a

hopper cooled. Will have to be redesigned to fit hopper cooled.'**

At page 299 of the record he testified respecting the trip he made to Milwaukee with his son, at the time the latter went up to the Harvester Company with the first of the new magnetos, as follows:

“Q. You heard the testimony, did you about your having been in Milwaukee, and having seen Mr. Waterman, with the magneto equipment of Joe’s invention?

A. Yes, sir; I heard that testimony.

Q. Did you recall being in Milwaukee for some such purpose?

A. I do, sir. I remember going there with Joe.

Q. Now, how did you happen to go?

A. I have some other matters to look after at the time, and Joe told me he was going. So I arranged that we would go together.

Q. Did you see Mr. Waterman there with Joe?

A. Yes, sir.

Q. What was said at the time of that meeting?

A. I do not remember, sir, what the conversation was.

Q. What did it relate to?

A. The fact that Joe had a sample magneto with him that he wanted tried out.

Q. Did you see that sample, at the time?

A. Yes, sir.

Q. Can you describe it? What was that sample?

A. It was the same as indicated by the drawings that I referred to.

Q. What drawings, Mr. Kane?

A. These drawings that he made at home, when he said he was going to change.”

As hereinafter shown, Mr. Milton was in the habit of sending young Kane to Milwaukee, with new or improved

*This statement in Mr. Kane’s diary was erroneous, since it was the design shown in the sketch Exhibit No. 17 (in which the magneto was set vertically), that could not be used on the hopper cooled engine, and not the magneto as actually built in accordance with Exhibit No. 18.

magnetos to be tried out, as Kane himself admits (Rec., 260-263) so that there was no significance whatever in his having been sent there on this occasion. The matter for present consideration, however, is that Mr. Kane, Sr., describes the magneto which his son took to Milwaukee as being "the same as indicated by the drawing" that his son had shown him at home on that Sunday afternoon; whereas the entire record upon the point shows that the magneto in question, and those following it, all conformed to the very different drawing which young Kane worked out (under Milton's direction according to the later's claim) at the Webster plant following the alleged making of the sketch at his home, such later drawing constituting Plaintiff's Exhibit No. 18. Mr. Milton explained in his testimony (Rec., 533) the construction shown in the Kane tracing, Exhibit No. 17, and a very similar but slightly different construction which he says preceded it, and pointed out the objections to them which led to the working out of the different design shown in the drawing, Exhibit No. 18.

As will be clear from the foregoing, we think, the testimony of Mr. Kane, Sr., wholly fails to corroborate his son's testimony as to the making of Exhibit No. 17 as an original "rough sketch" at his home on the Sunday afternoon in question with sufficient definiteness and positiveness to establish such fact, or to overcome the presumption, arising from the character of the drawing itself, that it was not so made but was exactly what it appears to be, and what Milton says it is (Rec., 533), a tracing made from a previously prepared drawing—presumably a study drawing which had been worked out at the Webster plant in the course of the evolution of the improved design of the Milton magneto.

If doubt be once thrown upon young Kane's claim to having made Exhibit No. 17 as an original sketch of his own ideas at his home on the Sunday afternoon in question, the remainder of the testimony introduced on his behalf wholly fails to establish his claim to inventorship or originality, for it is all entirely consistent with the theory

that the new design was worked out by a process of evolution, in the Webster plant and under Milton's immediate direction, as Milton claims.

Thus, there is nothing in the testimony of Mr. Munn, the next witness called on behalf of Kane, and who claims to have made the first magneto from the drawing, Exhibit No. 18, that is inconsistent with Milton's claim to have originated the improved design and that it was developed under his direction. Munn was an assistant of Milton's in the magneto department. Being asked regarding the form of magneto now in controversy, he testified (Rec., 318):

"Q. Will you state what you know about that apparatus, how it first came to your attention, under what circumstances and what followed?

A. Before it was manufactured or afterward?

Q. Before it was manufactured.

A. Before it was manufactured—E. J. Kane came to me one day and said that he thought he could get up a magneto and plug in which the magneto was mounted directly on the plug, doing away with the trouble we were having with magnetos in the field, with the old construction. I told him that he would better go ahead and make that up; better make up drawings and I would make up a plug from these drawings; and we would try it out.

Q. You told him that, did you?

A. I told him that, yes, sir.

Q. What happened then?

A. That was in the early part of 1908, I should say.

Q. I say, then what happened?

A. Then what happened?

Q. Yes, sir.

A. One day—he made up the drawings and I got the patterns made from the drawings, and got castings from the foundry, and machined up the castings, and made the plug according to the drawing.

Q. After you had made one up what was done with it?

A. We placed it on the Harvester engine which had been placed at our disposal and tried it out.

Q. Where was that done?

A. That was done on what we call the fifth floor of the new building of the old factory out at 15th and Western avenue.

Q. Of the Webster Manufacturing Company?

A. Yes, sir.

Q. Did you make up more than one of those samples?

A. I only remember the one.

Q. Did you have anything to do with the subsequent manufacture of an equipment of that general character?

A. I think not."

The witness does not claim to have ever seen Kane's tracing, Exhibit No. 17—in fact, states that he does not think he ever saw it (Rec., 320), which is rather strange in view of his previous conversation with Kane and the latter's alleged exhibition of the drawings to numerous persons the day after he claims to have made it, but with respect to the drawing, Exhibit No. 18, he testifies (Rec., 319):

"Q. You say that Kane made a drawing from which you made the first sample?

A. Yes, sir.

Q. Did you see that drawing?

A. Yes, sir.

Q. While it was being made?

A. While it was being made.

Q. Who was making it?

A. Mr. E. J. Kane himself.

Q. Where did you see him doing that?

A. On the fifth floor of the new building in the old plant.

Q. I call your attention to the paper which has been offered in evidence as Plaintiff's Exhibit 17, and ask you whether you recognize that or can identify that.

A. I don't think I have ever seen this, but I cannot state positively.

Q. I call your attention now to a paper which

has been marked Plaintiff's Exhibit 18, and ask you whether you recognize or can identify that.

A. To the best of my knowledge it is his drawing, that was made by E. J. Kane at that time.

Q. And the one upon which you saw him at work?

A. Yes, sir.

Q. Did you have any talk with Kane about the machinery disclosed in this drawing at the time you was working on the drawing?

A. Why, we was discussing it from time to time as he drew it up.

Q. What did you say—he or you?

A. I can't remember any particular conversation. I may have offered some suggestions as to the details of it for manufacture.

Q. Do you understand drawings? Are you capable of reading them?

A. Yes, sir.

Q. So that you know what that drawing shows?

A. Yes, sir.

Q. Did you know at that time?

A. Yes, sir.

Q. How did the machine which you say you made, the sample machine, compare with the machine as shown in this drawing, Plaintiff's Exhibit 18?

A. As I recollect it, when it was finished it was identical with the drawing. I think there were no changes made."

Mr. Munn refers to the tests which were made in the first magneto on an engine and says (Rec., 324):

"Q. What did you do with it when you had finished with it?

A. I think it was left on the engine, if I recollect rightly, and that is so far as I had anything to do with it.

Q. Did you put it on the engine yourself, or assist in doing so?

A. I am quite sure I did. I think Mr. Kane and I put it on together.

Q. Which Mr. Kane is that?

A. Mr. E. J. Kane.

Q. Now, do you know whether the Webster Company, after this first sample had been made and tested, as you have described, whether they then manufactured equipment conforming with the sample?

A. Yes, sir.

Q. When did they begin that manufacture, if you know?

A. Why, I would say within, say, two or three months, maybe after that first sample was made up.

Q. How long did it take you after Kane had finished the drawing and turned it over to you to make up this first sample?

A. I would say it was finished within three weeks.

Q. How soon did the test follow its completion?

A. Immediately."

At page 327 Mr. Munn states that, so far as he was aware, no one other than Mr. Kane had anything to do with the making of the drawing, and no one other than he and Mr. Munn and the latter's workmen with the building of the first magneto.

Mr. Munn was a partisan witness, in plaintiff's employ, but even so there is nothing in the facts to which he testifies that is in any way inconsistent with Mr. Milton's claim that the new magneto was developed under his direction and was an embodiment of his ideas. The record shows (p. 604) that when the question of originality between Kane and Milton first arose Mr. Munn expressed the opinion that Mr. Milton was the inventor or originator of the improved design, and that he later changed his views in accordance with the testimony which he subsequently gave on behalf of Kane. The very beginning of his cross-examination indicates the character of his testimony. The record shows that Mr. Milton had entire charge of the magneto department and business of the Webster Company, and that Mr. Munn was his assistant. Mr. Milton's testimony is to the effect that he was in intimate and daily contact with everything that was being done in the effort to improve the design of his magneto, but Mr. Munn testifies on cross-examination as follows (Rec., 328):

"Q. Did you say that Mr. Milton was your superior?

A. My immediate superior, yes, sir.

Q. The one to whom you reported and from whom you receive instruction, is that right?

A. Yes, sir.

Q. You have not said anything about Mr. Milton in connection with the work that was done in connection with this magneto, have you?

A. I have not.

Q. Why not?

A. Because at that time Mr. Milton's attention was occupied by something else, to the exclusion of everything else.

Q. Absolutely to the exclusion of everything else?

A. Absolutely to the exclusion of everything else.

Q. You never told him a thing about this at all?

A. Not a thing.

Q. And he was your immediate superior in the company?

A. He was my immediate superior in the company.

Q. This was a very important matter, wasn't it?

A. It was not as important as other things that we had in the fire at that time.

Q. It was a very important matter, wasn't it?

A. It was quite important, yes, sir.

Q. And it was quite seriously important, wasn't it?

A. Yes, sir."

And further, on page 329, referring to Exhibits 17 and 18:

"Q. Do you know whether Mr. Milton ever saw either one of those drawings, or not?

A. I rather doubt whether he ever did.

Q. You rather doubt it. Now, why do you rather doubt it?

A. Because Mr. Milton was away a great part of the time.

Q. He was away?

A. Yes.

Q. How frequently was he away from, say, January 1, 1909, until August 1, 1909?

A. Very probably away half the time."

Now, the record shows, by documentary proofs that cannot be questioned, that these statements of Munn respecting both the devotion of Milton's entire attention to something else and to his alleged absence from home during the period in question, were without foundation. Indeed, Kane himself testifies (Rec., 282-283) that Milton was "in and about the factory premises" throughout the period in question, and was absent only infrequently—perhaps "a couple of times a month." He also testified that he showed the drawing, Exhibit No. 18, to Mr. Milton soon after it was completed—a matter hereinafter discussed, as well as the documentary proofs above referred to.

Mr. Milton's own testimony respecting his absences from home during the period in question is found at page 550 of the record and reads as follows:

"Q. Now, during this period from when this development began, to the time that you made the suggestion to Mr. Kane, that is, in making drawings in accordance with your instructions, and along through to the completion of the work, were you out of town very much during that period, at that period?

A. At that particular period, or, from a period starting in advance of that, the end of December, on 'till I went to Europe, which was in August, I spent very little time away from Chicago, and I make that statement unreservedly, because I was married in December, the previous year, and my wife was a stranger here in town, she having come from the same town I did, Louisville, Kentucky, and objected very seriously to being left here alone; and Mr. Webster had given me Mr. Chiville to help me on the high tension work, not only to expedite the matter, but to help me, to enable me, to spend more time here in Chicago; and Mr. Kane was delegated to me similarly, on low tension work."

There was no other witness besides Kane and his father who claimed to know or was in a position to know anything about the alleged making of Exhibit No. 17 by Kane on the Sunday afternoon in question, and there was nothing whatever in the testimony of any of the other witnesses in any way inconsistent with the presumption that the exhibit was in fact a tracing which Kane had made from a previously worked out study drawing at the Webster plant and taken home to show to his father. No other witness, we believe, excepting Mr. Webster, and he has no distinct recollection of it, claimed to have ever seen the exhibit in question—not even Mr. Munn. We shall have occasion to discuss Mr. Webster's testimony at a later point.

Let us now consider young Kane's testimony, and determine whether it is of such a character that his unsupported and uncorroborated assertion that he made Exhibit No. 17 as an original sketch at his home on the Sunday afternoon in question can be accepted as sufficient and satisfactory proof of that fact, and as overcoming the contrary presumption arising from the character of the exhibit itself. On at least two points Kane's testimony shows upon its face that it is unreliable. The first is with respect to his exhibition of the drawing, Exhibit No. 18, to Milton and the alleged criticism of it offered by the latter. After stating (Rec., 265) that he did not show Exhibit No. 17 to Milton, but that he showed Exhibit No. 18 to him at Mr. Webster's direction or suggestion (Rec., 262) he testified at page 267, as follows:

"Q. You knew Mr. Milton had had a good deal to do with the development of this apparatus, as chief engineer of the company, and up to the time that you made that drawing* as your superior from whom you received instructions? You knew he had had a good deal to do with the development as far as it had then progressed, good, bad, or indifferent, isn't that true?

A. Yes, sir.

*Exhibit No. 17.

Q. Well, don't you think it would have been quite natural to have shown to him what you had devised along that line?

A. I do not know whether it was natural or not. I am pretty sure I didn't.

Q. Now, Mr. Kane, did you at any time talk with him about this?

A. About this one? (Indicating.)

Q. Oh, this invention which you say you made at that time.

A. I talked with him about this drawing after I made it (indicating).

Q. How soon after?

A. I talked with him right after I showed it to Mr. Webster.

Q. What was the substance of that conversation?

A. Why, I took this drawing to him, and, if I recollect rightly, he was sitting at his desk down on the main floor in the general offices of the Webster factory, and I spread it out before him, and I think I asked his opinion of it. Mr. Milton looked it over and he said, well he said 'I do not think that is going to work.' I said 'Why not?' 'Why,' he said, 'you have got the ignitor finger pointing upward on a direct push of the magneto rod and,' he says, 'that is going to place it out of time so that it won't trip at the right time.'

The Court: The witness is referring to Plaintiff's Exhibit 18.

Mr. Bulkley: I should have said that.

Q. That is what you talked with Mr. Milton about when you showed him that drawing?

A. Yes, sir.

Q. Is that all you talked with him about?

A. As near as I can recollect, that is about all that was said, except I said that I was sure it would work."

Now, the further cross-examination of Mr. Kane, on pages 268-270, clearly shows that there was nothing whatever on the drawing, Exhibit 18, which he showed to Mr. Milton which could possibly have furnished the basis of any such criticism. Without quoting the entire cross-ex-

amination on this point we call attention to the following at the bottom of page-269:

"Q. How did Mr. Milton know that it was going to act any differently from that which he had embodied in the old mechanism?

A. I do not know how he knew.

Q. He couldn't know from this drawing, could he?
(No answer.)

Q. You can answer the question or not. If it is embarrassing to you, I will withdraw it.

A. I do not know whether he did or not."

And further, on page 270, toward the bottom:

"Q. Oh, Mr. Kane, if you will just permit me a minute; I didn't ask you anything about that. I ask you now, if you will remember, to look at this drawing.

A. Yes, sir.

Q. And to tell me what there is shown on that drawing which would lead Mr. Milton or anybody else to suppose for a minute that it would operate any differently, in respect to the thrust-rod actuating mechanism, than it did in the old magneto arrangement of Mr. Milton. Now, tell us what there is on that drawing.

A. *On this drawing there isn't anything."*

Another portion of Mr. Kane's cross-examination on the pages in question (bottom of 268 and top of 269) is so inconsistent with his claim to having originated the new design at the time in question and under the circumstances disclosed by the record as to be simply incredible. Thus, referring to Mr. Milton's criticism above mentioned, he testified:

"Q. And that is what you talked about on that occasion, was it, in connection with that drawing?

A. Yes, sir.

Q. And that is all that was said?

A. Yes, sir.

Q. You just simply showed him that drawing?

A. Yes, sir.

Q. And told him that there was something you had?

A. Yes, sir.

Q. And then he made that answer?

A. Well, he, of course, looked it over a little bit; studied it.

Q. Yes, but that is all he said, was it?

A. Yes, sir.

Q. *And you didn't talk anything about this plug and magneto arrangement, did you?*

A. *No, sir."*

In view of the fact that the "plug and magneto arrangement"—the so-called unitary construction—was the great thing which Kane now claims to have invented or designed at that time, and in which everyone was intensely interested, and which was the sole feature of his invention disclosed to his father, it is manifestly incredible that if it had in fact been something new and original with Kane, at the time he showed the drawing, Exhibit No. 18, to Milton, it should not have attracted the latter's attention, and that neither of them should have mentioned it.

Mr. Milton's testimony respecting Kane's claimed exhibition of the drawing, Exhibit 18, to him will be found at pages 577, 578 of the record.

The other of the two points on which it seems to us that Kane's testimony clearly shows the unreliability of his statements, in his claim that he was so exclusively the originator of the new or improved design of the Milton magneto that he did not even know that anyone else was working on the problem. According to Mr. Webster's testimony the one thing which he most distinctly remembers respecting the troubles encountered with the old Milton magneto and the effort to relieve them was that he took the troubles and their solution up with Mr. Kane and Mr. Chiville at the same time and in the presence

of each other, and asked them to independently work on the matter, and stated that he would give a prize to the one who worked out the best design. Mr. Kane flatly denies any knowledge or recollection of this incident. Thus, in the course of his direct examination (Rec., 244) describing how he came to work out his new design and make Exhibit 17, he said:

"And along some time later than that I was upstairs, I think, on the fifth floor and Mr. Webster came up and asked me if I had any ideas or suggestions, or if there was anything that I could do to help him out in this situation. I told him I thought I could. That was, if I remember rightly, on a Saturday. I went home and the next day my father, Mr. Maurice Kane, sort of brought the proposition up and he said that the Harvester Company had pretty nearly come to a point that they were going to abandon the use of that magneto, unless somebody got busy and did something to overcome the trouble. I then sat down—I had a few drawing tools at home—and I made a sort of rough sketch which showed the magneto mounted on an extension of the ignitor plug. This sketch I showed to my father when I got it done, and we talked over it and we decided to take it down and show it to Mr. Webster. The next day I took it down and showed it to Mr. Webster, and Mr. Webster thought it a good idea."

On cross-examination, concerning the same incident, he testified (Rec., 264-265):

"Q. Now, when you had a talk with Mr. Webster, as you say, did he say that he had enlisted the efforts of anybody else except you to help him out?

A. You mean on this work?

Q. On this invention which you are now claiming as having been made by you.

A. You mean the time Mr. Webster—

Q. Let me put this to you, put a more definite and clearer question. Mr. Kane, you have testified, as I understand it, that Mr. Webster came to you and

said that he was having trouble with the form of magneto which was then being made and sold, and that the Harvester Company wouldn't have it any more, and that you had got to do something, and he asked you to help him out, is that right?

A. Yes, sir.

Q. Yes. Now, when was that? What month of 1909 was that when you had that conversation with Mr. Webster?

A. That was in April, 1909.

Q. Well, what part of the month, as near as you can remember?

A. As near as I can remember it, it was the day before I made this drawing.

Q. The day before?

A. Yes, sir.

Q. Did he tell you that he had asked or enlisted the help of somebody else other than you?

A. No, sir, he did not.

Q. Didn't say anything about that to you at all?

A. No, sir."

And further, on page 283:

"Q. Do you know anything about a design which was made by Chiville in an effort to improve the troubles that existed in the old Milton arrangement, at or about that time?

A. No, sir, I do not.

Q. You never heard anything about his having made an effort along that line, as well as yourself?

A. Well, I think Mr. Chiville did some work for Mr. Milton, on those two previous attachments that were taken to Milwaukee.

Q. But that is all you know about it?

A. Yes, sir.

Q. You do not know anything about Mr. Webster having asked Mr. Chiville as well as yourself to get up something that would relieve these difficulties? You do not know anything about that, do you?

A. No, sir, I do not.

Q. You did not see any design which Mr. Chiville had gotten up in connection with the same subject matter with which you were working; is that right?

You did not see any design which he had gotten up at or about that time?

A. No, sir.

Q. You did not make any comparison with him of a design by him and your own design?

A. No, sir, I made no comparison.*

Now, let us see what Mr. Webster and Mr. Chiville say. Here is Mr. Webster's version of the matter, under examination of his own counsel (Rec., 345-346):

"Q. Now, when you learned of the complaints and objections and practically the decision of the Harvester people not to use this equipment further, what did you do about the matter?

A. Why, I remember calling both Mr. Kane and Mr. Chiville, and saying, 'Here'—

Mr. Bulkley: Which Mr. Kane?

A. Mr. Joe Kane and Mr. Chiville. And if I remember right, I offered them a prize for the man that would get up the best design for this improvement.

Mr. Williams: Q. What did you say?

A. That is what I said. Do you want me to repeat my language, as near as I can?

Q. Why, the substance of it, if you do not remember the exact words. Did you say anything to them, for example, about the troubles, or about loss of business, or anything relating to the subject? If so, what did you say, as nearly as you can remember?

A. Well, I do not pretend to remember a conversation back nine years, but I know this: I may have said to them, 'We are in trouble here with this, and we have got to do something.' I presume possibly I did, but I remember distinctly saying: 'Why, bring down a new design here; I offer a prize for a new design,' to these two men.

Q. Now, did you (they) do anything, so far as you know, toward endeavoring to get up a machine?

A. Yes.

Q. —which would overcome the difficulties?

*And yet he admits (Rec., 251) that Chiville came up and saw his design, Exhibit No. 17.

A. Yes, they brought the design down, if I remember rightly, very quickly. I imagine it was on a Monday. Of course I am not sure about the date; but it was very soon after this, anyway, they both brought in a design, Mr. Chiville and Mr. Kane.

Q. In what form were those designs?

A. Well, I do not remember.

Q. I mean did they bring apparatus?

A. Oh, no.

Q. —or drawings or—

A. Not apparatus. Of course it must have been drawings. I do not remember. But I do remember distinctly that we decided—I say ‘we’—I suppose I put it up to our engineers, as I always did, in that kind of a case; and Mr. Kane’s design was accepted as much the better. Mr. Chiville himself said it was much the best.”

On cross-examination (Rec., 361) Mr. Webster further testified:

“Q. You say you selected Mr. Kane and Mr. Chiville to enter into competition with one another to produce a design to overcome the defects in your product concerning which the International Company had complained; is that right?

A. Yes, sir.

Q. And you offered them a prize?

A. Yes, sir.

Q. For the best one?

A. Yes, sir.

Q. Did you give Mr. Kane any prize?

A. I do not think so.

Q. Now, you say you referred to your engineers these two designs, to see which one was the better of the two; is that right?

A. I think my testimony was that I probably showed to them; but I haven’t any definite recollection of that.

Q. But you think you did?

A. Yes, sir.

Q. Now, to whom did you refer it?

A. I do not know.

Q. Well, what engineers did you have there at that time?

A. We had probably two or three engineers.

Q. Who?

A. Well, there was the engineer of the Webster Manufacturing Company.

Q. Who was that?

A. Well, it may have been Mr. Perkins, of the company.

Q. Did you look upon Mr. Perkins as an engineer?

A. Yes, sir.

Q. Of the company?

A. Yes, sir.

Q. What other engineer did you have at that time?

A. We may have shown it to our chief draftsman: I do not know.

Q. Who was that?

A. I do not remember, at that time.

Q. You do not remember his name?

A. No, sir.

Q. You have no recollection, in connection with the submission of this design to any of them?

A. No, I have not.

Q. But you do remember now that you went to Mr. Chiville and to Mr. Munn?

A. No, Mr. Chiville.

Q. To Mr. Kane?

A. Mr. Chiville.

Q. I beg your pardon.

A. And Mr. Kane, yes.

Q. And that you asked them to produce a design?

A. Yes, sir.

Q. How do you remember that so clearly?

A. Why, I do not know whether you can say why one thing fastens on your brain.

Q. Well, I am asking you; if you say you haven't any way of ascertaining—

A. —Well, I say I do know positively that I went up there and spoke to those two men, and said, 'Here, now, we have got to get up something'; and as I say, I think I offered them a prize, yes, sir."

And again, at page 687 of the record, being recalled on rebuttal, Mr. Webster further testified, referring to a statement in an affidavit of Mr. Chiville, as follows:

"I certainly did not speak anything about a unitary design. I know the whole thought in my mind was at that time that here was rather a desperate situation, and Kane had been out on the road and seen the troubles. Mr. Chiville was working in that department; and I remember distinctly going up there, and saying, 'Now, here, boys, I will offer a prize for the best design to remedy these troubles.'"

Mr. Webster had also testified some years earlier, in the Kane-Milton interference, respecting the same matter, as follows (Ex. Bk., 440-441):

"Q. 11. Please state as near as you can the circumstances surrounding the development of this self-contained type of ignition apparatus to which you have referred.

A. It having been called to my attention, the defects of the magneto which was located by means of a stud or attached to a stud on a cylinder, I called in two of our draftsmen and employees, Mr. Gerald Chiville, and Mr. E. J. Kane and suggested that they draw up an improved design which would overcome the defects in the other design. When these two gentlemen presented their ideas a short time afterwards the design invented by Mr. Kane was manifestly superior to all the others and we adopted the same. The design submitted by Mr. Kane was of the self-contained type to which I have referred in a previous answer."

Chiville was not called as a witness by either party at the trial below, the record showing that he was somewhere in California, but in the interference between Kane and Milton, plaintiff's present counsel introduced in evidence on behalf of Kane an affidavit of Chiville which plaintiff's counsel had previously prepared, and stipulated with himself, as heretofore pointed out, that it might be used

with the same force and effect as if Chiville were called and examined, and was so considered by the examiner of interferences in his opinion. This affidavit forms part of the Kane-Milton interference record in evidence here, and is printed at pages 445-447 of the exhibit book. Regarding the incident now under consideration, Mr. Chiville said (page 446) :

"In the spring of 1909 Mr. T. K. Webster, Sr., the president of the company, asked Mr. Kane and me to see if we could not design some unitary structure by which the spark plug carrying the contacts and also the inductor generator could be mounted together on a single support, so that they could be removed from the engine and replaced without affecting the adjustment between them. I recall that Mr. Webster told Mr. Kane and me to take a few days off from our other work, if necessary, and work independently of each other on this design at home.

* * *

A few days later Mr. Kane and I both submitted our designs. I produced a design with the magneto supported above the plug, but my design was rejected. Mr. Kane submitted a drawing showing a construction in which the magneto was supported out beyond the end of the plug by a bracket or bearing integral with the spark plug. The inductor shaft carried a yoke having an arm to be struck by a rod driven by the engine, thus tripping the inductor which was returned to normal position by springs secured to the yoke. An arm on the movable contact shaft carried an adjustable screw which was struck by the curved surface of one arm of the yoke when the yoke snapped back. A light spring tended to hold this adjustable screw in contact with the yoke."*

Now, notwithstanding this testimony of Mr. Webster and Mr. Chiville, Kane testified, as we have seen, that he did not know that Mr. Webster had submitted the problem to

*Of course this could not have been the design shown in Exhibit No. 17, for that does not disclose the "yoke" and other parts referred to.

anyone else, or that anyone else was working on it at the time he got up his new design.

Equally incredible is Mr. Kane's testimony on cross-examination at pages 284-285 of the record as follows:

"Q. Now, during these months after you had made this first drawing, up to the time when you had finally developed that which was to be delivered to the Harvester Company, you had no talk with Mr. Milton about it, did you?

A. No, sir.

Q. And you do not know whether Mr. Munn had any talk with Mr. Milton or not?

A. No, sir, I do not.

Q. And so you undertook, yourself, to develop, perfect, and give to the Webster Company that which was to constitute its product, to be sold to the International Harvester Company, without any consultation with its chief engineer; is that right?

A. Yes, sir."

So far as the record shows, Kane never invented or designed anything before in his life, and has never done so since,[†] but this radically new design of the Milton magneto sprang full fledged from his Jovian brain that Sunday afternoon—he just sat down, as he says, and sketched it right off—and he followed it up with working drawings and the building and testing of a magneto without any conference with Mr. Milton, and, according to his story, almost without his knowledge.

It appears from Mr. Milton's testimony (Rec., 526, 551) that at the time this newly designed magneto was gotten up the Webster Company did not have in its possession a gas engine suitable for testing it, and both his testimony and Mr. Kane's shows that the International Harvester Company supplied them with an engine for that

[†]Milton, on the other hand, as the record shows, was a prolific inventor in this very line both before and afterward—plaintiff's counsel had himself prepared nearly a dozen applications for Milton (Rec., 586) and the Official Gazette shows that patents continued to issue to him in large numbers in the succeeding years.

purpose. Mr. Kane's testimony upon that point is found at page 244 of the record, where, after stating that he showed his sketch," Exhibit 17) to Mr. Webster the day after it was made, he testified:

"That same afternoon, if I remember rightly, we took it over to the general offices of the International Harvester Company and showed it to Mr. Cavanaugh, who was assistant general manager in the experimental department. Mr. Cavanaugh looked at the sketch and said he thought we had made a real improvement, and to help us to put this thing actually in metal he immediately shipped us a six horsepower engine. I then went back to the factory of the Webster Manufacturing Company and started to make a working drawing embodying this idea. This drawing was made a few days later and then we immediately started to make up various pieces to make that attachment to put on a six horsepower engine."

According to Mr. Kane's testimony, Mr. Milton had nothing to do with the matter, and none of Kane's witnesses mention Mr. Milton as having been present at the test which was later made of the new magneto on the engine in question. Let us see what the documentary evidence in the case shows. At page 337 of the exhibit book is printed a letter written by Mr. Webster to Mr. Milton from the Union League Club on April 16, 1909, just as Mr. Webster was leaving for New York, and reading as follows:

"DEAR MILTON:

My. Tyson telephoned that the International would send an engine over to our place—I wish you would arrange to take a/c of stock of material on hand May 1st, also complete list and prices of tools in your Igniter Dept.—Please write me at N. Y., 88 Reade St., how the small sized magneto carries on—if you get a good spark?

T. K. W."

This letter was written, it will be noted, just two days after Mr. Kane claims to have completed the drawing, Exhibit No. 18, which is dated April 14, 1909. If Mr. Milton was having nothing to do with the development of the new design at that time—if he knew practically nothing about it—how did it happen that Mr. Webster was advising *him* that the Harvester Company would send over an engine on which to test it? Why did he not advise Kane, who claims (Rec., 265) that after the making of his first drawing and the exhibition of it to Mr. Webster he worked independently of Mr. Milton, and not under his direction and supervision as before.

Mr. Milton's testimony regarding the engine is found at page 551 of the record, and reads as follows:

"As this unitary structure commenced to take form, and hold out considerable promise, I wanted to test it out, as soon as we had it convenient, and I asked Mr. Webster if he could not get for me an engine; and that letter simply shows that he had done as I had asked him to. It was a Harvester engine, a horizontal engine."

On May 1, 1909, Mr. Webster who was then in New York on a second trip, wrote Mr. Milton the letter appearing at page 338 of the exhibit book, and reading as follows:

"DEAR JOHN:

Had a very interesting interview with Mr. Hill of 'Fairbanks.' Also interviewed the Prest. Mr. Wells—Mr. Haddock—and two of their foreign representatives. If the attachment of the $\ddagger\ddagger$ magneto proves out all right on Field B, they will put it on all their engines. They will have Bates & Edmonds send one of their engines to put the spring type on—The other style back of flywheel was so hard to start that they have not been selling any. We must follow up both of them as soon as possible.

Yours truly,

T. K. WEBSTER,
Pres."

A week later, on May 8, 1909, Mr. Webster wrote from New York the further letter to Mr. Milton appearing at page 340 of the exhibit book, the first paragraph of which reads:

"I wish you would advise me just how you are getting on with the smaller type of magneto, and also if you have done anything further in developing the coil."

Answering this and another letter of Mr. Webster's of the same date (Ex. Bk., 341) Mr. Milton wrote him the letter dated May 10, 1909, and appearing at the bottom of page 341 and top of page 342 of the exhibit book, and reading as follows:

"DEAR MR. WEBSTER:

I have your two letters of the 8th instant and in reply thereto desire to state that we have ordered dies for the smaller type of low tension magneto which is to be used on the Harvester work. The smaller type magneto for jump-spark work has been necessarily side-tracked for the various interruptions. Just prior to taking our inventory we had to concentrate our attention on getting the equipment ready for Mr. Chiville. The inventory was a serious interruption and since then we have been very busy attending to the Harvester Company's demands. They have gotten intensely impatient, telephoning several times a day as well as telegraphing us from Milwaukee. This has all been supplemented by many letters so you can readily see why we have concentrated our attention to this live business. We expect to make shipment today that will satisfy their immediate demands, which will allow us to go back to the high tension magneto tomorrow. I have done nothing further on the completion of the small high tension coil.

I am pleased to note from your various communications that the magneto is working satisfactorily.

Yours very truly,

JNO. L. MILTON."

As appears from these letters, and from other parts of the record, Mr. Milton was working on both high tension and low tension magnetos, and there was one of each kind that might be designated the small or "smaller type" of magneto, while the "coil" referred to was something entirely different; but there can be no doubt whatever that "the smaller type of low tension magneto which is to be used on the Harvester work," which Mr. Milton refers to in his letter, and for which he says "we have ordered dies," was the newly designed low tension magneto here in controversy.

Mr. Webster's letter of April 29, 1909, to the Harvester Company (Vol. II., p. 2) shows that the first magneto had been completed and tested out on the Harvester Company's engine prior to that date, for in the letter he enclosed a photograph of the engine and magneto, which he refers to in the letter and which he identified in his testimony as being the photograph constituting Plaintiff's Exhibit No. 5 and reproduced at page 5. Mr. Webster says in his letter of April 29, 1909:

"I enclose herewith photographs of the Harvester 6-H. P. Engine, with the latest attachment, which we are sure will suit all interested in this proposition. As already stated, we have covered all the points of objection very properly registered by Mr. H. A. Waterman.

First, as regards the rigidity, we have attached the magneto now by two 5/8" bolts, which have an ultimate strain of 40,000 $\uparrow\uparrow$ and a safe working strain, (namely a factor of safety of 6), 3600 $\uparrow\uparrow$ for the two bolts and we have only a strain of 35 $\uparrow\uparrow$ against this. We are sure you will be satisfied on the point of rigidity.

Second, we control this with the exhaust rod so you only spark when there is a charge in the cylinder.

Third, we have made the magneto smaller, so we believe now that we have got exactly what we have all been working for.

I am going to New York this afternoon to be gone

a week or ten days, and I trust by the time I get back we can settle this question so that we can get your orders in sufficient quantities to ship promptly and to put it on a manufacturing basis."

It was while in New York on this trip that Mr. Webster wrote Mr. Milton the two letters of May 8th, heretofore referred to, to which Mr. Milton replied by his letter of May 10th which has been quoted. Mr. Milton testified respecting this letter of May 10th at pages 556-558 of the record, and identified the "low tension magneto which is to be used on the Harvester work" as the newly designed magneto here in controversy. On cross-examination (Rec., 623-631) plaintiff's counsel made a strenuous effort to show that the impatient communications of the Harvester Company, referred to in the letter, could not have related to this newly designed magneto, because it was not at that time in production; but the Harvester people were thoroughly familiar with it by that time, had seen it tested on the engine at the Webster Company's plant, after which the magneto had been sent to Milwaukee for test by the Harvester people there, and they might well have been impatient regarding it, and desirous of having additional samples of it for test purposes or otherwise, in view of the trouble which they had experienced with the old design. It is immaterial, however, whether their impatient demands related to the new magneto, or whether the "shipment today that will satisfy their immediate demands," referred to in Mr. Milton's letter, was of the new magneto or not, for there can be no question that "the smaller type of low tension magneto which is to be used on the Harvester work" mentioned in the early part of Mr. Milton's letter, and for which he states "we have ordered dies," was the newly designed device, and the letter shows that Mr. Milton was at this date, as at all other times during the period of its development, in close touch with it, the assertions of Mr. Kane to the contrary notwithstanding.

On May 22, 1909 (Vol. II., 343-344) Mr. Webster wrote Mr. Milton a further letter from New York in which he said:

"Am glad to know that the Harvester magneto has been expressed."

—evidently referring to the newly designed magneto, as stated by Mr. Milton at page 560 of the record, where he says that Mr. Webster desired a sample of the magneto sent to him at New York for exhibition to some people there.

On October 25, 1909, Mr. Webster wrote Mr. Milton (then in Europe) the letter appearing at page 345 of Vol. II., in which, after referring to the trouble which the Harvester Company reported as having had in their foreign trade with the old type of Milton magneto, and to the fact that none of the new type had recently been sent over by the Harvester Company to their representative, Mr. Webster said:

"I think if you wish to retain the foreign trade for the Milton magneto it would be well for you to go over to Hamburg and see Mr. W. V. Couchman."

Mr. Milton acknowledges the receipt of this letter on November 10, 1909 (Vol. II., 346), in which he said:

"On my return to London this morning I find a letter from you under date of Oct. 25th.

I wish to thank you for same, and in connection with this matter desire to state that I have today written Mr. Couchman at Hamburg regarding my calling on him.

I trust that the Milwaukee Works are not having any further trouble with attachments for magnetos. I have felt a certain amount of uneasiness regarding their making these attachments correctly, due to the fact that they made the old style ones with very bad workmanship, which I believe is the principal trouble that Mr. Couchman is experiencing now."

The record shows elsewhere ((pp. 564, 565) that before going abroad, in August, 1909, Mr. Milton had had a complete set of tools or dies made in this country for the manufacture of the newly designed magneto abroad, and that upon arriving in England he at once placed its manufacture with a concern there, and also applied for the British patent which has been heretofore referred to. He owned the foreign rights to his inventions, whereas he was under contract with the Webster Company respecting his American rights to them; and as hereinafter shown, the delay in filing his American application upon the newly designed magneto was due to this situation and the indecision of Mr. Webster himself respecting it. (Vol. II., 472; Rec., Vol. I., 565).

As will be clear from the foregoing documentary proofs, we think, quite aside from Mr. Milton's own positive testimony hereinafter referred to, he was, contrary to Mr. Kane's testimony, in close touch with every step of the development of the newly designed magneto from its inception until it got into commercial production in both this country and abroad;* while with respect to the suggestion and contention on the part of plaintiff, that he was devoting himself exclusively to high tension magnetos, his letters to Mr. Webster prove exactly the contrary, and that the work on them gave way to work on the low tension magneto for the Harvester Company. Mr. Milton testifies on this point, at page 551 of the record, as follows:

"But I know that the low tension machine was always of more interest to me, because, as I stated before, I thought that that was the machine that was going to give us our first business, and I thought I knew a great deal more about it than I did the jump-spark machine."

The record shows, by Mr. Webster's own testimony,

*There is nothing in Mr. Webster's testimony to the contrary. Indeed, his testimony affirmatively shows that Mr. Milton was in charge of the new development, as the correspondence quoted indicates.

that it was he, rather than Mr. Milton, who was so excited and enthusiastic about the high tension or jump-spark magneto for automobiles, as indicated by the correspondence between them which has been referred to.

Mr. Kane testified (Rec., 284) that he made the detail working drawings from which the newly designed magnetos were subsequently manufactured—among other places, at page 284 of the record, as follows:

“Q. And this work of development went on, this device was embodied in this drawing, Exhibit 18—and may I interpolate to ask you if other drawings or working drawings were made of it at any time by the Webster Company?

A. Yes, sir.

Q. They were?

A. Detailed drawings were made.

Q. And those working drawings were made by Mr. Munn, and you and he discussed it together, did you not?

A. The working drawings were not made by Mr. Munn.

Q. Who were they made by?

A. I made the working drawings.

Q. Yes. Did you discuss—

Mr. Williams: Made by whom?

A. I made the working drawings.

Mr. Bulkley: Q. Did you discuss those working drawings with Mr. Munn, and talk with him about it? (No Answer).

Q. Do you understand my question, or is it vague?

A. Yes, sir, your question is all right.

Q. Yes?

A. I am trying to think—

Q. All right.

A. —if there was any discussions. No, sir, there was very little discussion with Mr. Munn on the working drawings. They were made practically just as the big drawing there shows.”

The testimony of Milton (Rec., 535, 537) and of the

draftsman, Kroeplin (Rec., 680), on the contrary, shows that the detail working drawings were made by Kroeplin, and there is produced and in evidence a large blue print of them (Defendant's Exhibit No. 21), dated June 3, 1909, identified by Kroeplin, and entitled "Details of Type B-2 *Milton Magneto* for I. H. Co. 6-8 & 10 H. P. Horizontal Engine." As explained by Kroeplin (and also by Milton) the exhibit blue print was a print made from a tracing which had in turn been made from an assemblage of detail drawings which had been previously made and used in the shop for the manufacture of the parts. Thus at page 680 of the record:

"Asked whether he remembered anything about the making of separate figures, or detailed figures on separate sheets, which were given to the workmen, the witness said he remembered making details for brackets and other castings for the machine on paper, Manila paper drawings, which were turned over to the pattern maker from which he made patterns. They were usually mounted on a board and shellacked in order to preserve them. When the various parts had been completed by the workmen the drawings would be brought to the drafting room and tracings would be made from them, and they would be all assembled together and one tracing made of the whole mechanism."

And further, at page 681:

"Being shown Exhibit No. 13 and asked if he remembered having seen any such a machine at the time he was making the figures of the drawing, Exhibit No. 21, witness said he did not remember the complete machine, but remembered parts such as the spring, the rods to which the springs were fastened, the bracket—the brass casting connecting the two magnets—and the laminated bars; nothing else. Asked if at various times or frequently he did drafting work in accordance with the instructions of Mr. Milton, witness said he made the details in accordance with Mr. Milton's instructions, and never received instructions from

anyone else to make drawings in connection with magneto work. Being asked to describe the usual way in which a draftsman goes to work to make a design and embody it in a drawing, witness said the customary way is to first make a pencil layout on manila paper, and if the layout is satisfactory a tracing is made from it on tracing paper and blue prints made from the tracing. Being asked whether draftsmen ever employed any other kind of paper or tracing cloth than that which witness had described, witness testified as follows:

"My experience has always been that working with some complicated mechanism if, after you had the pencil arrangement on your manila drawing, and you wanted to see different movements of certain parts, you would take what was called tracing paper, place it over the drawing, sketch off your parts from that, and if there were different movements that that machine would make you would move this paper to show the different movements. I remember doing that in connection with this magneto work. For instance, taking the details of the inductor, showing the different arrangements and movements of it by making a sketch or laying tracing paper over the drawing and moving this paper around.

The Court: Q. I do not understand yet where you get your object from which you make your manila sketch. Is that from a drawing also?

A. The manila paper sketch is made from the ideas, which in this case were given to me by Mr. Milton.

Q. Well, given to you on paper?

A. On ordinary free-hand sketch paper.

The Court: Yes.

Mr. Bulkley: Q. Mr. Kroeplin, did you ever get any instructions from anybody else other than Milton in connection with what work you had to do in the making of figures or drawings—the figures of Exhibit 21 or in the making of Exhibits 17, 18, 19 and 21?

A. I had no instructions from anyone else."

Mr. Milton's testimony regarding the same matter is found at page 545 of the record, where he says:

"A. We followed our regular routine on that, which was to make drawings on regular drawing paper, and shellac them or put a clear varnish on them, to protect them while the mechanics were handling them. And then these drawings go to the shop, and after the pieces were finished, and any changes noted on them, then we would make our tracings from those drawings.

Q. Are you telling me now what you would do?

A. That is what we did as a regular thing, and I do not recall having changed it for this particular development.

Q. How were those drawings prepared? Were they with all of the details on one sheet, or how?

A. Each part was detailed on a separate sheet.

Q. And then what was finally done?

A. And then, as I said, those drawings were assembled, after the corrections were made on them, and traced on the one sheet.

Q. Now, why was that plan pursued, of making separate detailed sheets?

A. To expedite the production of the samples, the models."

At page 551 he further testified regarding the same matter as follows:

"Q. Now, after you had completed the work, or after the general study work, and designing, had been completed, then what next did you do after you had your various parts made, and your entire tracing completed?

A. Well, there was a stage ahead of that. The detail drawings were made, and put in the shop, and the parts made, and the machine was assembled, and then it was—

Q. That is, before the complete tracing?

A. Oh, yes.

Q. Embodying all the—views?

A. Yes.

Q. The machine was made?

A. Yes; the machine was tried before the tracing was made. Then we put it on the engine, and tested it, ran it.

Q. Now, point out among these various exhibits here one of those completed engines as it was completed, before you had the tracing in its entirety made and tried out on the engine.

A. Well, that is difficult to do right now, because I do not believe there are any models there that represent that machine as it was first made; there are some that would carry the idea exactly; there is the one you have your hand on (indicating) and the model, Exhibit 15, this side of it—they carry the idea generally, almost the complete idea.

Q. What were the differences, if any; could you tell, in a general way?

A. Why, the difference, one difference particularly, the first one we made did not have the automatic cut-out feature on it, which these have. That was applied to the first engine of which we have photographs. It was a separate device, and later it was incorporated into this design, as is shown here. I would say that was the principal difference. Another big difference—I will not say 'big' difference—it was an important difference—was in the yoke; the first yoke was a forging, made up of four pieces.

Q. Now, keep your voice up on this, so that we can get it.

A. There was a main body, that had two pins driven into it, and riveted over. That gives three pieces. And the fourth piece was a little steel insert, and, these, we used a malleable iron casting, with the steel insert riveted into it, which brought us to two pieces. That was just another evidence of the development.”*

Kane testifies (Rec., 244-245) that he placed the date, April 11, 1909, on the sketch, Exhibit No. 17, at the time it was completed on that Sunday afternoon “Because it is a habit of mine to date all these drawings,” but it does not appear that he ever had occasion to date a drawing

*Kane nowhere mentions this development of the yoke in his testimony, but on the contrary seeks to give the impression that in the drawing, Exhibit No. 18, and in all of the magnetos made following it the yoke was exactly as shown in his and Milton's patents. No yoke was present in the construction disclosed in Exhibit No. 17.

before or afterward, excepting the Exhibit No. 18, which bears the date April 14, 1909. At another place in his testimony (Rec., 245) he says he placed the date on the sketch, Exhibit 17, at the suggestion of his father, who told him "Always date your drawings and sign them." Such advice might well have been expected from a man of long experience in connection with inventions and patents, as Mr. Kane, Sr., was (Rec., 303, 304), but the surprising thing is that, in view of such experience, Mr. Kane, Sr., did not himself sign the drawing, as a witness. On cross-examination, referring to what his son had said about his father telling him to date and sign the drawing, Mr. Kane, Sr., testified: "I would be very apt to do that from what I knew of the patent business" (Rec., 314), but being asked why he did not himself witness the drawing, he said, "I don't know, sir. I don't remember just—," while admitting that it would have been "a much better precaution to preserve his rights" if he had witnessed it.

It appears throughout the record—from the testimony of all of the witnesses on both sides—that the most serious objection to the old Milton magneto was its insecure attachment to the cylinder of the engine, such attachment consisting in mounting the magneto upon a cylindrical "boss" projecting from the side of the cylinder and securing it with a set-screw. The drawing, Defendant's Exhibit No. 16 (Vol. II., 741) was introduced for the purpose of showing this boss, where it is so marked. This boss was never intended for any such purpose, or to support a considerable weight of any kind, but was merely a mounting for an anti-friction roller which formed a bearing for the reciprocating rod that operated the movable electrode of the igniter that had been employed with battery ignition. (See cut of engine on page 17 of Vol. II.) This boss was not only poorly adapted, by reason of its shape and character, to the support of the magneto, but it was not strong enough to support it, and sometimes broke off. Moreover, it was formed on the outer

shell or water jacket only of the cylinder, which was comparatively thin, and the record shows that when it was broken off it would sometimes tear away part of such jacket with it. Mr. Kane himself testifies regarding this boss, and the trouble which the mounting of the old magneto on it caused, as follows (Rec., 243):

"Of course, one of the great troubles with that old type of attachment was that it was a heavy weight supported on a very small boss which was never intended to support any such weight. * * *

That boss was originally intended to support a small roller, I would say, a couple of inches in diameter, and there was a half inch rod worked over the top of this roller and there was a very little strain on it. * * * It was something left over as a matter of prior engine design, this boss."

Mr. Milton testifies regarding the boss in question and the difficulties encountered with it, at page 514 of the record, as follows:

"A. This wall of the cylinder, the outer wall, was rather thin. Between it and the main cylinder wall was a space which was for carrying the water for cooling the engine. That would vary in thickness and in strength as all gray iron castings do.

Q. Well, what broke the wall, the outer wall? Why did that wall break?

A. It broke as a result of these extra strains that were put on it. This little boss primarily was arranged to carry a little roller, and only a light roller over which was guided the pusher rod for working the make and break electrode of the sparking plug which is mounted at the back, at the closed end of the cylinder.

Q. In that case what kind of ignition was it?

A. That was battery ignition.

Q. That is, this boss was primarily intended to simply support a light rod passing, an anti-friction roller, over which this light rod passed?

A. That is what I attempted to describe."

In his report of March 15, 1909, on the old Milton magneto (Vol. II., 1), on which plaintiff lays much stress, Mr. Waterman, of the Harvester Company, referred to the mounting of the Milton magneto on this boss of the engine cylinder as follows:

"The entire outfit is more heavy and more bulky in general form and construction than desirable, if not than necessary, the new igniter, including bracket, weighing about 25 pounds. The Milton magneto equipped for operation as erected regularly at Milwaukee, has required a strain of about 25 pounds on the cylinder-boss. The size of this boss cannot be altered without interfering with engine repairs."

And in his letter of April 6, 1909, to Mr. Kane, Sr. (Vol. II., 335-336), Mr. Waterman said:

"Work is under way perfecting the durability of the Wattles magneto, *and considering some better means of attaching the Milton magneto to engine.*"

Mr. Webster also testified upon the same subject, at page 348 of the record, as follows:

"It was extremely vital to the interests of the Webster Manufacturing Company that we make good on this magneto. Now, on the practical side, one of the great difficulties was the attachment. * * * Now, the thing that impressed me about this whole business was that we had got to attach it in a substantial manner. The next thing was, we had got to make it smaller; it was too big."

And further, at pages 364-365:

"Q. Do you have any recollection now, Mr. Webster, as to where the defects were in the means by which the magneto was attached to the cylinder?"

A. In the original Milton?

Q. Yes, in the original Milton.

A. Well, the original Milton, as I remember it, was attached to a boss on the engine.

Q. And it was the weakness of this boss, was it—

A. No.

Q. —which constituted the defect?

A. No. The boss was small; the Harvester Company did not want to change their design, and we had to adapt it the best we could, and we were allowed to put it on a boss.

Q. Now, I am trying to get from you what knowledge you now have.

A. Yes.

Q. Or recollection, concerning this defect.

A. Yes.

Q. Now, will you tell me to just what specific extent you have now a knowledge of that defect?

A. It was an imperfect way of attaching it.

Q. This boss was an imperfect way?

A. No; the way we could get onto the boss and hold it was so imperfect.

Q. What do you mean by 'get onto the boss and hold it'?

A. Attach it to the boss."

Now, notwithstanding this testimony of Mr. Webster, showing that the great objection to the old Milton magneto was its insecure attachment to the engine, and the fact that he testified repeatedly, as we have heretofore shown, that he put the problem of remedying the trouble and overcoming the difficulty up to Kane and Chiville jointly, and offered a prize for the best design, Kane not only testifies, as we have seen, that he knew nothing about Chiville or anyone else having been asked to work on the problem, but he testifies (Rec., 275), that Mr. Webster never said anything to him about improving the means of attachment of the magneto to the engine, although this was what he thought was the great feature of the new design, and the only feature of it concerning which he spoke to his father. Thus:

"Q. What was the most important thing that you and your father discussed, and Mr. Webster discussed, Mr. Kane?

A. I and my father discussed largely the means of fastening the magneto onto the engine.

Q. Yes. And that was the thing in connection with which Mr. Webster had asked you to help him out, wasn't it?

A. No, sir.

Q. What? Didn't Mr. Webster ask you to help him out in connection with the means of fastening the magneto and the plug to the engine?

A. *No, sir, he did not.*

Q. He didn't discuss that at all with you prior to the time that you filed your application?

A. He did prior to the time we filed the application.

Q. Well, when was it he discussed that with you?

A. Discussed that with me when I showed him the drawing."

It is of course incredible that Mr. Webster should have been so impressed with the difficulty of securely attaching the old magneto to the engine, and should have gone to both Kane and Chiville and appealed to them to find some solution of the difficulty, *without ever discussing and mentioning the actual trouble itself*. Indeed, Kane squarely contradicts himself at a later point in his testimony, where he says (Rec., 276-277):

"Q. Now, to go back, you say Mr. Webster had a talk with you about the difficulties arising in connection with the old Milton magneto, is that right? We will go slow, now, Mr. Kane, so as to have ample time to answer and not to confuse.

A. All right. I thank you. As I stated before, Mr. Webster come up to me and said the situation was serious; *that they had to have some better means of attaching the magneto*, or something had to be done, and wanted to know if I could offer any suggestions or help him.

Q. In reference to what did he want you to do something?

A. *In reference to any new attachment.*

Q. Well, what new attachment?

A. Any new attachment that I could make to help him, or anything.

Q. Well, what did he tell you was the trouble he wanted you to remedy, if it was possible for you so to do?

A. As near as I can recollect, he didn't make any attempt to specify what the troubles were.

Q. Did he tell you anything about any particular part of the apparatus?

A. No, sir.

Q. —that he wanted you to direct your attention to in order to cure the evil?

A. No, sir, he did not.

Q. Didn't you know what he was talking about when he spoke of the troubles and difficulties that had arisen in connection with the apparatus of the old Milton type sold to the International Harvester Company?

A. Yes, sir, I had a good idea.

Q. You had a good idea. And what was that idea?

A. *Well, the magneto was insecurely mounted on the engine."*

Kane's testimony respecting what happened at the interview with his patent attorney, when he determined to apply for a patent some seven or eight months later, is equally incredible. Thus, at page 274 of the record he says:

"Q. Now, you haven't yet told me what it was that you described to Mr. Sprinkle as your invention when you went there to take this patent out.

A. If I remember right, we took one of these old pamphlets illustrating the old way of fastening it onto the engine, and I also took an illustration, a blue print, I think, showing the new attachment, and I said, 'Here is the way we used to do it, and here is the way I have done it. You get a patent on it.'

Q. And he said he would, is that right, or he would try to?

A. He said he would try to."

We have heretofore shown that, at another place in his testimony, Kane testified that he told his attorney that the *automatic cut-out* was the most important feature of his new invention (Rec., 275, 277, 278) and that he did not consider the combined plug and bracket as involving any invention at all (Rec., 281), but the inconsistencies between these statements and that quoted above are no greater than that between the quoted statement and what the patent attorney actually did in pursuance of his alleged instruction. He said he showed the patent attorney how they formerly attached the magneto to the engine, and his improved method of doing it, and told him to get a patent on the latter—but the application which the patent attorney prepared and filed pursuant to this instruction, and which Kane read and swore to (Rec., 278), did not adequately disclose this feature of his alleged invention, did not contain a single claim addressed to it, nor the slightest indication that it constituted any part of the invention intended to be patented.

Kane testifies, as we have seen (Rec., 244), that he showed his sketch, Exhibit No. 17, to Mr. Webster on the following day after he made it, and that he and Mr. Webster took it to the general offices of the International Harvester Company that same afternoon and showed it to Mr. Cavanaugh, assistant general manager of the experimental department; and that after receiving Mr. Cavanaugh's approval of his design he went back to the plant of the Webster Company and began making working drawings, which resulted in the production of the drawing, Exhibit No. 18, a few days later.

Now, this exhibition of the sketch to Mr. Webster and the visit of Mr. Webster and Mr. Kane to the offices of the Harvester Company and their exhibition of the sketch to Mr. Cavanaugh occurred on Monday, April 12, 1909, according to Kane's story; and Mr. Cavanaugh was the assistant to Kane's father, who was at the head of the experimental department of the Harvester Company. Yet

Kane, Sr., produced a memorandum book (Rec., 296-297) from which he testified as follows:

"Q. Now, by reference to that book, or to any other circumstances, will you state as nearly as you can when it was that your son, Joe, first showed you and talked with you about this drawing, which you have identified, this Plaintiff's Exhibit No. 17?

A. I have got the memorandum book of 1909 right here, and the first memorandum here in reference to the magneto is April 14, 1909, and it says, 'Cavanaugh: Joe has worked out a much simpler attachment of magneto to engine.' Cavanaugh, by the way, was my assistant in the experimental department, and was looking after that class of work, that is, engines and magnetos and all that stuff.

Q. Who made this entry you have just read from your memorandum book?

A. I made it myself, sir.

Q. When did you make that?

A. April 14th.

Q. What was the purpose of your making that entry?

A. So as to call Mr. Cavanaugh's attention to it.

Q. Did you do that?

A. Yes, sir.

Q. What did you say to Mr. Cavanaugh?

A. Substantially what this memorandum refers to."

According to young Kane's testimony, he and Mr. Webster had shown his sketch to Cavanaugh two days earlier, on April 12, 1909, and must have done so if his story about returning to the Webster plant and completing the drawing, Exhibit No. 18, on April 14, 1909 (the date it bears) is true. It is of course incredible that Kane, Sr., should not have known anything about the exhibition of the sketch to Cavanaugh on Monday, April 12th, in view of his interest in the matter and his testimony regarding the events of Sunday and Monday. His memorandum is therefore entirely inconsistent with his son's story.

His memorandum book seems to be unreliable in other respects as well, for at the bottom of page 297 and top of page 298 of the record he testifies from it that he saw the newly designed magneto (presumably for the first time) in operation on an engine at the Webster factory on May 13, 1909, and testifies that he made the entry on the day. His own testimony and that of his son and Mr. Webster all show that as soon as the first magneto was completed and put on an engine for test, the Harvester people, including Mr. Kane, Sr., and others interested, came over and saw it in operation; and the documentary evidence in the record (Mr. Webster's letter of April 29, 1909, and accompanying photograph, Exhibit Book 2, 5) show that the magneto had been completed and placed on the engine and tested, and a photograph taken of it, at least as early as that date, whereas according to the memorandum book of Mr. Kane, Sr., he saw the magneto for the first time two weeks later.

Mr. Kane's memorandum book is also in error in what it says with reference to the magneto which he saw tested on the engine, for it states that it "will not work on a hopper cooled—will have to be redesigned to fit hopper cooled," whereas, as heretofore stated, it was the design shown in his son's alleged sketch, Exhibit No. 17, that would not work on a hopper cooled engine and would have to be revised and redesigned to fit such an engine, and not the design shown in the drawing, Exhibit No. 18, which was followed in all of the magnetos that were constructed.

Mr. Kane did not produce his memorandum book at the time he testified in the Kane-Milton interference, his explanation now given (Rec., 302) being that he did not think of it at that time. His testimony in the interference will be found at pages 433-437 of Vol. II.

Kane's testimony, heretofore referred to, to the effect that immediately after showing the sketch, Exhibit No. 17, to Mr. Cavanaugh, on Monday, April 12, 1909, he returned to the Webster plant to take up the work of making working drawings, and by Wednesday, April

14th, had completed the drawing, Exhibit No. 18, is about as incredible as some of his other statements which have been discussed—not that the work could not have been accomplished within that time, but that Kane did it himself, alone and unaided and without any suggestions or assistance from others, and as a mere matter of working out and developing the design shown in Exhibit No. 17. As heretofore noted, and as will at once be apparent upon inspection of the two drawings, the two designs are very different, indeed, and have nothing in common excepting the mere fact that in both instances the magneto is supported (but in very different ways) upon the ignitor block or plug. Thus, in Exhibit No. 17, the magneto is set vertically, while in No. 18 it is set horizontally. In No. 17 the armature shaft has a trip finger projecting to the right from it and co-operating with a bell-crank whose opposite arm is connected with the push rod operated by the engine shaft. In Exhibit No. 18 the push rod co-operates directly with the trip finger on the armature shaft, the bell-crank is dispensed with, and the push rod is supported upon a roller and provided with a cam surface to disengage it from the trip finger. In Exhibit No. 17 the movable electrode is operated by contact of a short lug projecting to the left from the armature shaft with a screw carried by an arm upon the movable electrode. In Exhibit No. 18 there is provided a yoke-member having two opposing arms, one of which co-operates with an adjustable screw carried by the arm on the movable electrode, and each of which is provided with a pin projecting parallel with the armature shaft and having the end of one of the armature springs connected to it. There is no such yoke, or anything resembling it, in Exhibit No. 17. In Exhibit No. 17 the armature shaft is in axial line with the right-hand portion of the flange of the ignitor plug, thus setting the entire magneto over so far to the left that, in order to clear the carburetor heretofore referred to, the magneto had to be placed in vertical position. In Exhibit No. 18 the axis of the armature shaft is shifted to

the right, entirely beyond the line of the flange of the ignitor plug, thus shifting the center of the magneto itself in that direction and to that extent, so that the magneto could be turned to horizontal position.

Is it reasonable to believe that, starting with the sketch or tracing, Exhibit No. 17, and merely carrying out and developing the latter, as he says he did, Kane should have worked out the entirely different design of Exhibit No. 18 between Monday afternoon and Wednesday? Is it not altogether more reasonable to assume that Exhibit No. 18 was a wholly independent drawing, having no connection with Exhibit No. 17—"a study drawing" worked out by Kane under Milton's direction, as Milton says it was, either before or after the alleged date of Exhibit No. 17, or both?

Milton describes a design which Chiville worked out under his direction which is very much more like Kane's sketch or tracing, Exhibit No. 17, than is the drawing, No. 18, which Kane claims to have evolved from No. 17. Indeed, Chiville's design appears to have been very similar to that shown in Exhibit No. 17. Thus, at page 576 of the record, after stating that Mr. Webster had become impatient at the delay in overcoming the troubles with the low tension magneto, and offered to take Mr. Chiville off the high tension work, which he was doing under Mr. Milton's direction, and put him on the low tension work, Mr. Milton testified:

Q. Did you do that?

A. I did.

Q. What did Mr. Chiville do about it?

A. Mr. Chiville was working, doing his drafting in the main drafting room on the third floor of the old building of the Webster Manufacturing Company, and he took the ideas that I gave him of consolidating the double link motion machine with the bracket supporting magneto, with the spark electrodes in the casting that it was formed in—

Q. Do you mean the spark plug?

A. The spark plug carrying the whole thing on the two bolts.

Q. What two bolts?

A. The only two bolts that are available at that time for that; the bolts that formerly held—

Q. The cylinder bolts; the engine bolts?

A. They are both on the side of the cylinder wall. Mr. Chiville carried out the instructions very faithfully, as I recall it. He took that identical apparatus, consolidated it with the plug, and turned it in a vertical position, and it gave me substantially what we would have if we took the double link motion and put it on the plug. He worked it with the bell-crank lever, which was the first connection with the push rod. That formed one of the links. This was a very unsightly affair and it was not possible to use it because it would interfere or strike the hopper on the hopper cooling type of the International Harvester engine. While he was doing that Mr. Kane was working on the other type, which I finally used.

Q. The double link type?

A. No, we gradually eliminated the parts—

Q. Did he start with the double link type?

A. We started with the double link type, with that general arrangement, and as we worked on the thing and got it developed in the process of development we dropped one part and then another as we simplified it, which is the ordinary process of these experimental developments.

Q. Then what did you finally reach? What type of adaptation of the magneto did you reach?

A. We finally reached the unitary plug with magneto supporting bracket as an integral unit.

Q. Single or double link?

A. We finally eliminated the links, and had the push come over the roller direct, instead of being moved by the link. The roller did the guiding."

As will be noted, the design which he says Mr. Chiville got up under his instruction, was very like that shown in Kane's Exhibit No. 17—the magneto in vertical position, the armature operated by a bell-crank lever, and the

interference with the hopper of the hopper cooled type of engine. And he says that while Mr. Chiville was working on that design "Mr. Kane was working on the other type, which I finally used"—i. e., the design evolved in the study drawing, Exhibit No. 18.

Is it not altogether more reasonable to believe that Exhibits Nos. 17 and 18 were in fact entirely independent designs, as a comparison of them indicates and as Mr. Milton says they were, than that the design of No. 17 was conceived by Kane, as a new and original thing on the Sunday afternoon in question, and followed up immediately afterwards with what he calls a mere carrying out or development of it, but which was in fact the production of the new and radically different design in Exhibit No. 18?

In view of the testimony contained in the record—the pressing demand for Kane's alleged invention and his story of the circumstances under which it was produced and introduced into practical use—some of the representations of his attorneys and himself to the Patent Office, in the course of the prosecution of his application, are also interesting. Thus, at page 661 of the Exhibit Book, in a petition relating to the Milton and Podlesak interferences, his attorneys said for him:

"Soon after the time that applicant made his invention set forth in the above referred to application, he disclosed the same to John L. Milton, the patentee Milton above referred to, and Emil Podlesak, the patentee Podlesak above referred to, who were in the employ of the Webster Electric Company in the experimental department thereof. *At that time the Webster Electric Company was not interested in this invention, for the reason that there was no demand yet for such electric igniters.* After applicant had made a number of his igniters, and showed the advantages thereof, said Milton applied for his patent, and licensed the Webster Electric Company to manufacture said electric igniters. Then later Podlesak made application for his patent, and also licensed the

Webster Electric Company to manufacture under his patent."

This petition was supported by the affidavit of Kane (pp. 663, 664), in which he alleged, among other things:

"that he disclosed his invention as set forth in the above-entitled application to both John L. Milton and Emil Podlesak, the above-named patentees, long before either Milton or Podlesak made application for their above-mentioned patents, and while said Milton and Podlesak were in the employment of the Webster Electric Company, in the experimental department thereof, *in an endeavor to interest the Webster Electric Company in affiant's invention.*"

Both Kane and Munn, as we have seen, sought to give the impression that Milton had nothing whatever to do with the design or development of the improved magneto, and would even have the court believe that he knew very little about what was going on, notwithstanding the fact that he was at the head of the magneto department and in direct charge of it. Mr. Webster's testimony, however, does not lend any support to such a theory, for while he now seems to be under the impression (contrary to that indicated by his conduct at and following the events now being considered) that the new design was Kane's idea, rather than Milton's, he nowhere gives the impression by his testimony that Milton was not thoroughly familiar with it and its development from start to finish. As we have already seen, he wrote Milton a letter on April 16th, within two days after the completion of the drawing, Exhibit No. 18, advising him that the Harvester Company would send over an engine upon which to test the new magneto; and he repeatedly says, in the course of his testimony, that the new design, which he thinks was first submitted to him in the form of Kane's alleged sketch, Exhibit No. 17, was shown to and considered by the engineers of the company. (Rec., 346, 361, 369). It is of course incredible that it

should have been shown to and considered by the engineers of the company, whoever they have been, without being shown to and considered by Milton, who was at the head of the magneto department and the man most directly interested, and it is perfectly clear that he was not excluded. Indeed, at page 369 of the record, he expressly mentions Mr. Milton as one of those with whom he discussed the new design. Thus, referring to the sketch, Exhibit No. 17, which he thinks he took and exhibited to Mr. Cavanaugh after it had been submitted to him by Mr. Kane, he says:

“Q. And you did not receive any explanation from Mr. Chiville or Mr. Munn or Mr.—?”

A. Mr. Chiville—

Q. Or Mr. Milton, or Mr. Kane, about this design, did you?

A. Mr. Milton, and Mr. Munn—all of us undoubtedly talked about it.”

Mr. Webster, like Mr. Kane, Sr., identifies the construction disclosed in the sketch, Exhibit No. 17, as being that which was shown to Mr. Cavanaugh by assuming that it is the same construction that was afterwards built (Rec., 369), whereas, as we have seen, the construction actually built bore no resemblance whatsoever to that disclosed in Exhibit No. 17, excepting in the single fact that the magneto was supported (in a different way) by the ignitor block or plug.

Mr. Webster's testimony shows throughout that his memory is unreliable, and that he is very apt to confuse present impressions with what he thinks is a distinct memory of past events. Thus, for instance, he had no recollection whatsoever of having testified in the interference between Kane and Milton respecting the very matters concerning which he was examined in the present case, although, according to the interference record (Vol. II., 439-443) he testified in the interference case on November 28, 1916, only a little more than two years prior

to his testimony in the present case. He admits that it is most extraordinary that he has no recollection about having testified in the interference, but nevertheless asserts that he has not the slightest memory of it. (Rec., 349-351, 365-367). He also testified (Rec., 365) that he has no recollection of seeing the sketch, Exhibit No. 17, which Kane claims to have shown to him on that Monday morning, saying:

"I do not remember seeing this sketch at all. I suppose that I did see it, and that I turned it over to the engineers, and we approved it, or I went down and showed it to Mr. Cavanaugh, and he approved it."

Mr. Webster further testifies, at pages 366-367 of the record, as follows:

"How do you know, Mr. Webster, that this design that was submitted ultimately to Mr. Cavanaugh, was the design that Kane had at the time that it was submitted by him in conjunction with Mr. Chiville? How do you know that it was the same design as that?"

A. Well, the same as you would; it would not be anything else but the same design. There was no legerdemain that he could change it to something else.

Q. How do you know but what it was the design of somebody else that was adopted, rather than that which Mr. Kane produced in conjunction with Mr. Chiville?

A. Well, it was done so quick, I don't think a man in one day could get up a design that was successful, and bring it out.

Q. Didn't you hear Mr. Kane say that he had gotten it up in one day?

A. He made the design in one day.

Q. Yes.

A. Yes, he said. Very true. But it was all done under our roof.

Q. I am not inquiring as to where it was done.

A. But it was done right in the—

Q. Done in one day?

A. Started right off, doing it, yes.

Q. You asked him, one day, to get a design for you?

A. Yes.

Q. And he got it the next day?

A. The day following.

Q. Well, the day following.

A. Yes.

Q. All right. You do not know what that design was, or anything about it, do you?

A. Yes, I do. Don't ask me a foolish question like that.

Q. What was it?

A. Of course I know.

Q. What was it?

A. It was the design that we adopted and put on our engine.

Q. Are you sure?

A. Yes.

Q. That it was the one you adopted?

A. Yes.

Q. And put on your engine?

A. Yes.

Q. Did you see any drawing of it at that time?

A. I do not know whether I did or not.

Q. Did you see any drawing of it at that time?

A. I do not know whether I did or not.

Q. Then how do you know that it was the same design, that he explained to you on that day, that subsequently went on the engine?

A. Because, Mr. Bulkley, I know that that machine was made right off from that design that was in the factory there, and that I am practically sure I took that design right down to Mr. Cavanaugh, and showed it to him, and got his approval."

As heretofore pointed out, the only drawing which Kane claims to have shown to Mr. Cavanaugh was his alleged sketch, Exhibit No. 17, and that disclosed a design radically different from the design of the magneto as actually built, the latter conforming to the subsequent drawing, Exhibit No. 18. Mr. Webster, like Mr. Kane, Sr., erroneously

assumed that the magneto as built corresponded with the design disclosed in Exhibit No. 17.

While it is Mr. Webster's present impression that Kane was the originator of the improved design in question, his testimony shows that he was not in a position to really know whether the design did in fact originate with Kane, or with Milton, or with some one else. Except for the fact that he thinks Kane showed him the sketch, Exhibit No. 17, which he claims to have made at his home on that Sunday afternoon, and which he erroneously assumes to have disclosed the construction subsequently employed, there would manifestly be little basis for his impression respecting the origin of the design, for had it been developed in the ordinary course of evolution in the Webster plant, under Milton's immediate direction and as an embodiment of his ideas, Mr. Webster's knowledge of the situation would not have been any different from what it appears by the record to have been.

Moreover, Mr. Webster's present impressions, which happen to accord so well with the interests of his company, are not in accord with his conduct following the getting up and utilization of the improved design. He admits, as we have seen, that he never gave Kane the prize which he thinks he offered to the man who should produce a successful design, and it does not appear that Kane ever complained of his failure to do so. Moreover, when the question of applying for a patent came up he told Kane (according to the latter's testimony), that he did not think there was anything patentable in the new design. (Rec., 256.) Mr. Webster testifies that he has no recollection of this incident (Rec., 364), but the record shows, by documentary evidence, that he later approved the filing of an application on the new design in Milton's name, and as Milton's invention, and his company paid the expenses of the preparation and prosecution of the application, acquired the patent (along with others) from Milton for the sum of \$25,000, advertised the new magneto as the "Milton Magneto," marked it patented with the

date of the Milton patent after the latter issued, notified alleged infringers that they were infringing the patent—and continued to act in this manner, with a full recognition of Milton as the actual originator and inventor of the improved design, until long after the present suit was brought, whereupon, being advised by the company's counsel that it was necessary to acquire the Kane application (of which he had had no previous knowledge), for the "protection" of the company, it was purchased for the sum of \$12,000. (Rec., 371-374.)*

In other words, from the year 1909 continuously on forward to the year 1916—a period of some seven years—neither Mr. Webster nor his company, by a single word or act, evidenced in any manner whatsoever that Kane, rather than Milton, was the originator of the newly designed magneto, which they were continuously manufacturing and selling throughout that period, but on the contrary their every word and act were in accord with a full recognition of Milton as the inventor or originator, and entirely inconsistent with any thought or recognition of Kane as such.

There is no pretense or claim that any new light has been thrown upon the origin or inventorship of the new design during the succeeding years—that Mr. Webster or the plaintiff has any better or more complete knowledge at the present time respecting such origin and inventorship than they had contemporaneously with the events themselves. On the contrary, Mr. Webster's own testimony clearly shows that he must have had a better and

*There was no necessity for the Webster Company acquiring the Kane application for protection against any patent that might be issued upon it, since it already held an implied license, or shop right, to use the invention by reason of Kane's employment; and even after acquiring the application there was no necessity for taking away Milton's claims and repatenting them to Kane, and attempting to do the same thing with Podlesak's claims, and carrying its effort all of the way to the Court of Appeals of the District of Columbia, in order to secure "protection" against the Kane patent. The purpose for which it acquired the Kane application was manifestly the use which it subsequently made of the Kane patent in the present suit.

more accurate knowledge of the facts ten years ago than he can possibly have to-day with his admittedly failing memory, and yet, with full knowledge of the facts at the time, we find him personally communicated with regarding the filing of the application for patent in Mr. Milton's name and authorizing it and paying for it. Thus it appears that, having filed the application for his British patent on October 28, 1909, Mr. Milton had one year's time, until October 28, 1910, under the convention covering such matters, to file his application in the United States. As the expiration of the time approached, he took the matter up with the Webster Company's counsel and on September 10, 1910, they wrote him (Vol. II., 347) that they were making inquiry about the matter. On September 29, 1910, having heard nothing further from them, Mr. Milton wrote Mr. Williams as follows (Vol. II., 347):

"I have not received further reply to your letter of the 10th instant. The time in which to get this application (British No. 24,838 of '09) has almost expired. I am obliged to request you to advise me by return mail your decision as well as that of the Webster Mfg. Co., on this matter. Please let me have the information as asked."

In reply to this letter Mr. Williams wrote Mr. Milton on October 10, 1910 (347):

"Replying to your letter of September 29th, I have to say that we called the matter of the application covering the subject matter of the British patent No. 24,838/09 to Mr. Webster and the Webster Electric Company but have had no reply. I do not believe they would wish me to decide the matter on my own initiative. I have therefore written them again, enclosing a copy of your letter."

On October 10, 1910, Mr. Milton wrote Mr. Webster personally the letter appearing at page 348, reading:

"Mr Lynn A. Williams has informed me that he has asked you for instructions regarding filing an application for United States patent on the invention disclosed in my British application No. 24,838/09 and that you have not replied. Please decide this question and advise Brown & Williams and me immediately. I regard this case of importance and believe it is to be worth a patent."

On October 13th Mr. Williams wrote Mr. Milton that he had talked with Mr. Webster over the telephone about the matter, and that "He promised to come in to-day and to come to a final decision one way or the other," and later, on the same day, Mr. Williams wrote Mr. Milton a second letter (349), in which he said:

"Mr. T. K. Webster has been in talking with me about the United States application covering the subject matter of your British application No. 24,838/09. He will not be able to come to a definite conclusion until tomorrow when he wishes me to look over one of the low-tension machines which the company is now making.

I told him that you appreciated the importance of having the United States application filed at once and that you were, therefore, insistent that a decision should be reached. I told that you were right in appreciating the importance of prompt action. The result of our conference was that we shall proceed at once with the preparation of the application papers and before they are finished Mr. Webster will have come to a decision. If he does not wish to file the application, it will be available to you for that purpose and can be filed easily within the time limit."

It appears that Mr. Webster did not "come to a definite conclusion" on the following day, and that on October 25, 1910, Mr. Williams sent the application to Mr. Milton with the letter appearing at page 350, the last paragraph of which reads as follows:

"You can file the application as suggested by forwarding the original specifications properly executed, together with the drawings to the Commissioner of Patents. Do not fail to enclose a money order for \$15 filing fee."

The record shows (569) that Mr. Milton followed these instructions and forwarded the application to the Patent Office himself, with the filing fee, but that the Webster Company later on took over the application and paid the expenses of its preparation and prosecution. (Rec., 578.) In the interim, however, Mr. Williams had become anxious about the payment of his fees for the preparation of the application, rendered a bill for them to Mr. Milton and pressed him for payment (Vol. II., 351, 352), whereupon, on February 8, 1911, Mr. Milton wrote Mr. Webster the further letter appearing at page 353 of the Exhibit Book and reading:

"With reference to my U. S. patent application No. 589,564 covering the trip finger and spring yoke, desire to state that Mr. Williams seems quite anxious to know for whom he has and is handling this case. He has just sent me a second invoice for this work. If you do not care to have this patent taken out, please send Brown & Williams a check for \$82.50, as per the enclosed invoice, and charge the same to my account."

This is the end of the correspondence as found in the record, but the latter shows that Mr. Webster subsequently concluded to have his company take over the application, and that it paid the expenses of it.

The significance of the foregoing lies not only in the fact that the new design was called to Mr. Webster's personal attention *as Mr. Milton's invention*, but that Mr. Milton was asserting it to be an invention of importance, upon which he wished to obtain a patent for himself if the Webster Company did not care to take out a patent under his contract with it. With full knowledge of all

the facts concerning which he now testifies, and from which he seeks to show that Kane and not Milton was the inventor of the subject matter in question, Mr. Webster never questioned the fact that Mr. Milton was the real inventor and entitled to any patent that might be obtainable, his only hesitation apparently being due to the fact that (as Kane asserts he told him) he doubted whether there was anything patentable in it. For whatever it was worth, he fully recognized Mr. Milton to be the inventor of it, and apparently had no thought whatever to the contrary.

Now, let us briefly consider Mr. Milton's own testimony regarding the matters which have been discussed, and such corroboration of it as the record affords. It is to be remembered, in considering the testimony in his behalf and that in behalf of Kane, that practically all of the record evidence—letters, drawings, prints, etc.—relating to the subject matter of the controversy is in the hands of the plaintiff, and that most of the witnesses familiar with the matters in controversy are likewise still in the employ of plaintiff, while Kane himself, although not now in plaintiff's employ, is directly interested in upholding, and no doubt obligated to plaintiff to assist it in upholding, his patent for which he has so recently received a large sum of money from plaintiff.

The witness called on behalf of Milton, on the other hand,—the few that were available,—were and are wholly disinterested, and even Milton himself has not the slightest pecuniary interest in the outcome of the controversy. His sole interest in it is that expressed in his letter to plaintiff's counsel when asked to concede priority to Kane—a desire to see his patent treated right, and his belief that he was in fact the originator and inventor of the subject matter disclosed in it. (Vol. II., 359).

Mr. Milton did not make a good witness—his interest in the controversy had not been sufficient to induce him to make any careful preparation for his testimony, in the way of going over such old correspondence and drawings

and other papers as he had in his possession, to refresh his recollection of the events occurring ten years earlier, and his unrefresh recollection, particularly with respect to dates, was often not in accord with established facts and documentary proofs; but we think no one can read his testimony from beginning to end without being impressed with his honesty and with the truth of his statements according to his own sincere belief. Moreover, the record shows that he was in no way hostile to plaintiff or its counsel, but had been in conference with them (as well as defendant's counsel) shortly before testifying, and had submitted to them, as well as to defendant's counsel, such documentary proofs as he had and thought would be helpful to either side.

With this understanding of his interest and disposition in the controversy, let us briefly examine his testimony.

At pages 508 to 517 of the record Mr. Milton relates the history of his connection with the design and development of electric ignition apparatus and describes the circumstances under which he became connected with the Webster Company, and the difficulties encountered with the early magnetos manufactured by the company under his direction, including that which the company was supplying to the International Harvester Company at the date of the developments here in controversy.

With respect to the connection of young Kane with the Webster Company he testifies that it was he, Milton, who arranged for him to come with the company, having done so at the request of Kane's father. (Rec., 975). With respect to the origin and development of the design of magnetos here in controversy—the so-called unitary construction—he testifies (Rec., 531) that the Harvester people told them that they had had so much trouble with the old magneto mounted on the boss of the engine cylinder that they could no longer permit them to be mounted in that manner—that this information came to him through Mr. Webster, and that they then had a serious conference on the subject, as a result of which Milton proposed “the combining of the

whole thing into one structure and putting it on the big, strong bolts, back of the cylinder; that is, building a magneto with its supporting bracket, its mechanism, double link, and carrying the electrodes," concerning which idea he further testifies at page 532 of the record as follows:

"Q. And fastening it to the engine how?

A. And fasten it into the engine with these big, strong bolts. And Mr. Webster said—I don't remember his words exactly, but the instruction was to see how quickly we could do it, or if it could be done. So I started to work on that, and at that time Mr. Webster had given me Mr. Chiville who was doing my high tension development work, and I had Mr. E. J. Kane to do my low tension work; Mr. Kane had been with the company then several months, he having come there in the latter part of 1908, in the fall of 1908, and had been working around there, and I found he could make drawings and he had made some drawings under my instructions, and I remember giving him that problem to do.*

Q. What did you say to him?

A. To take this double link machine and extend that bracket so as to form the spark plug for holding the electrode, and put in the insulation, and making up the mechanism, as I remember it. That was my instruction and I remember him starting on it, and I remember his making a couple of sketches on it which were study sketches, without getting the thing down to a final meeting place. There was one series of operations—

Q. What did Mr. Kane do?

A. He started to work on these designs, and he was working at that time upon the fifth floor, and there was a little tool room that had been vacated some months before that. He made the drawings under my instructions, and which I watched, each stage, because I was very keenly interested in it because I was very hopeful of solving this problem. I always

*At page 663 of the Record, Mr. Milton states that when he first saw Chiville at the Webster plant he was working as a draftsman in the drafting room.

believed that the low tension machine would be the first one that we could get material business from.

Q. Where did this interview occur with Mr. Kane, if you remember, when you told him what you wanted him to embody in the drawing?

A. I cannot say definitely whether it was downstairs or up on the fifth floor, but I am inclined to think on the fifth floor *because I spent most of my time up there.*

Q. About when was it, what time of the year?

A. Well, since I have looked up my records and different letters and drawings in connection with it, it takes form in my mind as the spring of 1909.

Q. With reference to the time when the engine, the Merwin engine, was taken away, about how long after that was it?

A. The Merwin engine had been gone a number of weeks, I don't know how long, when we got the information that we could not use that boss.*

With respect to Kane's alleged sketch of April 11, 1909, Mr. Milton testifies (Rec., 533):

“Q. I show you Plaintiff's Exhibit 17; did you ever see that drawing before?

A. I have no way of definitely identifying this drawing, but I remember very distinctly the idea as portrayed here as being one of the forms that were discussed in connection with this development work to which I referred.

Q. What development work was that, Mr. Milton?

A. The building of the mechanism, the bracket, the sparker, and sparker electrode into a single structure.

Q. And how mounted on the engine?

A. Mounted on the engine with the two bolts which formerly held the spark electrode. These are the two bolts; the arm coming here, coming around

*The Merwin engine here referred to was a 4-horse power International Harvester Company engine, upon which the Webster Company had been testing magnetos, and was sold to Mr. Merwin and taken away in January, 1909. (Rec., 526, 538-540.)

here. One of the studies that preceded this came immediately around and made a box structure, which was very bad from a foundry standpoint; it was very difficult to machine. This one here has some of those objections. The magneto as shown here, and this whole thing is of a reduced size. This one had another objection to it, I remember it, this extension here, back under toward the closed end of the cylinder wall; on one type of the International Harvester Company horizontal engine was an exhaust pipe, according to my recollection; it was known as their famous Hopper Cooled Engine; the exhaust pipe went up, I remember we made the change—

Q. Who made that drawing, Mr. Milton?

A. This is a tracing, made from—evidently from a drawing. * * * According to my best remembrance, Mr. Kane made this tracing.

Q. How did he come to make it?

A. Well, how he happened to come to make this particular tracing I don't recall, because our layout work had been done on other form of paper.

Q. What do you refer to as the other layout work?

A. In making drawings we generally use a—in fact, it was almost without exception, we used a grade of paper that would stand very considerable erasing, because we never knew when we put down a line how long that was going to remain, because we were making changes in getting the ideas worked out so as to meet the various conditions of machine work in the foundry and assembly and installation, and so on.

Q. Were such other layout drawings as that made?

A. They were.

Q. Do you know whether it was prior to this tracing, as you call it, or drawing, or whatever it is, No. 17?

A. I should say it was prior to this.

Q. And who made some or all of those drawings, those layout drawings?

A. Mr. Kane made them, under my instructions.

Q. Did you ever see this drawing, Plaintiff's Exhibit No. 18?

A. I remember the idea as shown here very plainly. I have no direct way of identifying this particular drawing.

Q. What idea do you refer to, Mr. Milton?

A. The structure of the plug, and bracket and mechanism and all, in their relations to each other. This looks like the original study drawing, although it is not a complete one.

Mr. Williams: I object, your Honor, to these speculations as to what it looks like and so on. He says he can't identify it, can't remember it.

The Witness: I remember the idea very definitely; I remember the type of machine very definitely. The physical piece of paper itself I do not identify, and I have no means of doing that. This does not show the idea completely; it is a study drawing—in other words, it is not a working drawing.

Mr. Bulkley: Do you have any recollection as to who made that drawing?

The Witness: E. J. Kane, or substantially the same thing; I know he worked on that idea under my instruction at that time."

At page 535 of the record he identifies the blue print of June 3, 1909 (Defendant's Exhibit 21) as a print from a tracing of the working drawing made by the draftsman, Kroeplin, for the new design, and on page 536 he further testifies respecting it:

"Q. Did you have anything to do with the embodiment of the structure shown in these drawings in actual mechanical form, and if so, what?

A. I watched over that development very carefully, to make sure that the design not only accomplished the desired result from the standpoint of the operation of the engine but also to get a type which could be made in a foundry without serious objection from the foundry, a type that could be machined readily and at low cost. I remember having discussed those points with the various men in charge of the work that that naturally fell on. In this particular design I remember distinctly talking to Mr. Munn regarding the machine points of it.

“Q. Going back a little, Mr. Milton, tell us if there is anything more with reference to talks you had with Mr. Kane about particularly that form of device which is shown in his tracing or drawing, Exhibit No. 17. Did you tell anything about that?

The Witness: I think I can answer to this drawing, or a duplicate of it or from sketches. When we got to this stage, which incidentally this design resembles very similarly the features as shown on the original single link machine; we came up with the pusher rod from the cam shaft direct onto the link; this link has an extension on it, however, which directly engages with the trip finger of the magneto which is also present in the other machine. And the next thing I remember in connection with this was to get rid of this arm that came around here at the back, because, as I said, there was one type of Harvester horizontal engine where that would interfere. And I remember, to get rid of that I proposed putting it down underneath, fastening up across, which is substantially what we have in our structure, as you see here in some of these models; I have reference to the one on that demonstrating stand.

Q. Which one is that?

A. The one under the blue print. The one that Mr. Carter has his hand on. We put that yoke underneath, taking it from the end towards the closed end of the cylinder and putting it down below.

Q. Will you just tell us what was the particular kind of construction there shown and what criticism you made, if any, with reference to it as a foundry proposition?

A. Well, I have referred to the foundry proposition, and this being a little bit awkward and which could be improved by changing the position of some of these parts, and in even this one it is better than our first one; that is, easier to make.

Q. Did you talk with Mr. Kane?

A. I did.

Q. Anything about—

A. This one.

Q. —the form of construction which is shown here in Plaintiff's Exhibit 18?

A. I remember working with Mr. Kane on this design, as it progressed.

Q. Did you have any criticism of that form, or type there, of embodiment there illustrated in Plaintiff's Exhibit 18, and if so, what, which you made known to Mr. Kane?

A. Well, it is my remembrance that when we got to this stage of this study drawing, that it was turned over to Mr. Kroeplin who made the working drawings there so we could make one of them, because we could not have made one from this drawing.

Mr. Williams: You could or could not?

The Witness: Because we couldn't.

Mr. Williams: Could not?

The Witness: Could not. It is not a finished drawing, and there are no dimensions on it. Strictly a study drawing. That is, I want to modify that and say that in using the class of help that we were using at that time."

At page 545 of the record Mr. Milton further testified:

"Q. Mr. Milton, will you go on, and tell us what was done after the completion of the drawing, the yellow drawing, Plaintiff's Exhibit 18? Do you know what one I refer to?

A. Yes, I recall. I know; why, we made working drawings for patterns; then after the patterns were started, or immediately following that drawing, we proceeded to make the drawings for the machine work; and while the drawings for the patterns were being made, and the castings procured, we started on the other parts, as we would ordinarily do in a case of that kind, where we were working under speed.

Mr. Williams: Q. What is that?

A. I say, as we would ordinarily do in a case of that kind, when we were working for speed, expediting the work.

Mr. Bulkley: Q. Well, what character of drawings did you make? How were they made, and how were they given to the workmen? In what form?

A. According to my best memory, we followed our regular form.

Mr. Williams: Q. What is that?

A. We followed our regular routine on that, which was to make drawings on regular drawing paper, and shellac them or put a clear varnish on them, to protect them while the mechanics were handling them. And then these drawings go to the shop, and after the pieces were finished, and any changes noted on them, then we would make our tracings from those drawings."

At page 550 of the record Mr. Milton explained why he distinctly remembered that he was in Chicago continuously during the period of the development of the new design, his testimony on this point having been heretofore quoted, and continued:

"Q. Now, during this period just stated to you, from the time this development work began on this particular type of magneto, in which the magneto is mounted upon the plug, up to the conclusion of that development, to a point where it was produced as a marketable article, how much time did you devote to the high tension work, relatively speaking?

A. Well, it is a bit difficult for me to say it, after the lapse of—in round figures,—ten years.

Q. I only ask approximately. You do not need to—

A. But I know that the low tension machine was always of more interest to me, because, as I stated before, I thought that that was the machine that was going to give us our first business, and I thought I knew a great deal more about it than I did the jump spark machine."

And further, on page 551, after describing the arrangement made with the Harvester Company to let the Webster Company have an engine upon which to test the magneto, heretofore referred to:

"Q. Now, after you had completed the work, or after the general study work, and designing, had been completed, then what next did you do after you had your various parts made, and your entire tracing completed?

A. Well, there was a stage ahead of that. The details drawings were made, and put in the shop, and the parts made, and the machine was assembled, and then it was—

Q. That is, before the complete tracing?

A. Oh, yes.

Q. Embodying all the views?

A. Yes.

Q. The machine was made?

A. Yes; the machine was tried before the tracing was made. Then we put it on the engine, and tested it,—ran it."

The tracing here referred to was that from which the blue print of June 3, 1909, identified by Mr. Milton and Mr. Kroeplin and heretofore referred to, was made. It will be remembered that Mr. Webster's letter of April 29, 1909, to the Harvester Company, and the accompanying photograph, show that the magneto had been completed and placed on the engine and tested prior to that date.

At the bottom of page 551 and continuing on the following pages, Mr. Milton further testifies regarding the character of the first magneto of the new design that was built:

"Q. Now, point out among these various exhibits here one of those completed engines, as it was completed, before you had the tracing in its entirety made and tried out on the engine?

A. Well, that is difficult to do right now, because I do not believe there are any models there that represent that machine as it was first made; there are some that would carry the idea exactly; there is the one you have your hand on (indicating), and the model, Exhibit 15, this side of it,—they carry the idea generally, almost the complete idea.

Q. What were the differences, if any; could you tell, in a general way?

A. Why, the difference, one difference particularly, the first one we made did not have the automatic cut-out feature on it, which these have. That was applied to the first engine of which we have

photographs. It was a separate device, and later it was incorporated into this design, as is shown here. I would say that was the principal difference. Another big difference,—I will not say 'big' difference,—it was an important difference,—was in the yoke; the first yoke was a forging, made up of four pieces.

Q. Now, keep your voice up on this, so that we can get it.

A. There was a main body, that had two pins driven into it, and riveted over. That gives three pieces. And the fourth piece was a little steel insert, and, these, we used a malleable iron casting, with the steel insert riveted into it, which brought us to two pieces. That was just another evidence of the development.

Q. And, with those differences, it was substantially the same as—

A. Substantially the same.

Q. As Plaintiff's Exhibits 15, or 47?

A. Substantially the same."

As heretofore pointed out, Mr. Kane made no mention whatever in his testimony of the character of this first magneto that was built after and in accordance with the drawing, Exhibit No. 18. Mr. Milton was apparently much more familiar with the details of it than was Mr. Kane.

With reference to the completion and test of the first magneto Mr. Milton testified at pages 552 and 553 as follows:

"Q. About when was it that this machine was completed, from the separate drawings which were distributed among the workmen?

A. Well, I cannot say definitely, but it seems to be in my memory that it took something like two weeks to do it.

Q. From and after what time?

A. From and after the time we made the study drawing, as shown in this exhibit, Exhibit 18.

Q. The yellow drawing?

A. Yes.

Q. Plaintiff's Exhibit 18?

A. Yes, sir.

Q. What more, if anything, did you have to do with reference to the manufacture of this new type of magneto construction, after the completion of the first specimen?

A. Why, it was presented to the important prospective customers we had, the Harvester Company. And I discussed that with Mr. Webster, as the best method of doing it, and right away it was agreed that we would ask them to come over; so Mr. Cavanaugh and Mr. Maurice Kane, and Mr. Stewart, who was in charge of the patent department at that time, all came over.

Q. Came over where?

A. To the Webster Manufacturing Company's plant; and we took them up to the fifth floor, and ran the engine for them, with this device on it; and everybody was very much pleased; considerable enthusiasm was exhibited."

It will be remembered that young Kane and his father and Mr. Munn all carefully refrained from mentioning the fact that Mr. Webster was even present at this first exhibition of the magneto to the Harvester people, seeking to give the impression that he had no connection with or interest in the matter. Quite aside from Mr. Milton's own testimony on the point, however, it would tax one's credulity to the breaking point to believe that Mr. Milton was not in the thick of it throughout and present at this demonstration. No one goes the length of saying he was not present, although seeking to give that impression.

With respect to the making of patterns for the new design, and the foundry and machine work of it, Mr. Webster testified at pages 553-554 as follows:

"Q. Now, Mr. Milton, will you detail, as fully as you remember it, just what you had to do with the making of the patterns, from the drawings, and to do with the foundry work, as it went through, and the machine work, as it was continued on, in connection with this first machine?

A. This first machine was experimental, and to

get that through the other departments, with least possible time, I found that it was always necessary to appear in person, because Mr. Webster had arranged with all of his departments to do what I wanted immediately, at the expense of the other things that were coming through; and I would talk to a man by the name of Cummings, in charge of the pattern department, and watch it through the various stages; and I discussed the design with the foundry manager.

Q. Who was that?

A. Mr. John Anderson. And also discussed with Munn the method of machining that. I remember particularly that when this irregularly shaped casting came out, it was a little bit of a puzzle as to just how we could machine that experimentally, and also as a regular manufacturing proposition; and I remember his showing me how he would get it to one side of the machine and how he would turn it around on the lathe, and machine the other side, and how he would hold the parallel faces in line, and how he would hold the concentric holes together, and he would measure it, over in a chuck—to get the off-center holes, which were the ones in which the insulated electrode and the movable electrode were put. I remember those details very distinctly. Also, it was a new problem to us; we had never made a make and break mechanism in our experiments before; that was the first one.

Q. Do you remember any particular man connected with the machine work other than Munn, with whom you had to do, or dealt with, in this development?

A. Why, on the experimental work, I discussed that with Munn. I do not recall having talked to anybody else, for the experimental end of it, that is, bringing through this first model.

Q. Well, subsequently, I mean, in connection with the machine work, what did you have to do?

A. You have reference to the production end; I suppose?

Q. I presume so.

A. The mechanics."

We shall have occasion a little later to refer to the corroborating testimony of Mr. Anderson.

At pages 562 and 563 of the record, Mr. Milton describes the circumstances under which he temporarily severed his connection with the Webster Company in the summer of 1909 and went to Europe. Mr. Webster had testified that Mr. Milton left without Mr. Webster's consent and against his wishes—"laid down" on him, as it were—but Mr. Milton's testimony shows quite the contrary, and his testimony is corroborated by correspondence had with Mr. Webster while Milton was in Europe, as well as by his subsequent return to the Webster Company. Mr. Webster was evidently greatly disappointed at the failure of the high tension automobile magneto, and disposed to place the blame on Mr. Milton, whereas the record shows that Mr. Milton was never enthusiastic over the high tension work, with which he was much less familiar than with the low tension, and that it was Mr. Webster who was enthusiastic and excited about it, and correspondingly disappointed when it failed.

Mr. Milton testifies (bottom of page 562), that he went to Europe in the third week of August, 1909, and returned to this country before Christmas, and was in Tiffin, Ohio, where the Webster Company was then located, on Christmas Eve, and became connected with the company again in January or February. He also testified (p. 629) that the newly designed magneto was in commercial production before he left for Europe, that he had tools and dies made in New York for its commercial production in Europe and took them to England with him, and placed the manufacture of the magneto there, at the same time making application for an English patent. (Rec., 564, 565, 647.) In the prolonged cross-examination of Mr. Milton, plaintiff's counsel strenuously endeavored to show that both the completion of tests on the first magneto, and the commercial production of subsequent ones, was of later date than Mr. Milton thought they were, but the record is clear on the

point. With respect to the completion and tests of the first magneto, that date is fixed by the documentary evidence of Mr. Webster's letter of April 29, 1909, and the accompanying photograph, and corresponds exactly with Mr. Milton's testimony to the effect that the first magneto was completed and tested within about two weeks after the working out of the design in the drawing, Exhibit No. 18; while with respect to commercial production, there can be no mistake about the date of that when Mr. Milton distinctly remembered that it was going on before he left for Europe in August.

At page 565 of the record, Mr. Milton explains why he did not apply for an American patent before going to Europe and filing an application there for an English patent, as follows:

“Q. Why didn't you take out— Did you file any application in the United States before in Europe?”

A. I had not at that time.

Q. Why not?

A. Because Mr. Webster and I had not agreed on the patent policy, and we simply could never come to conclusions when those questions came up, and I knew that it was my plan to file the thing,—to file the application as soon as I got to Europe and that my rights would be preserved under the rulings of the convention, so that I could apply for it at any time within a year after that.”

We have heretofore referred to Mr. Milton's patent contract with the Webster Company, under which the latter had the American rights to Mr. Milton's invention, upon certain terms and conditions, and to Mr. Webster's indecision and dilatoriness respecting the filing of Mr. Milton's application on the magneto here in controversy. Mr. Milton was examined at length respecting said contract by plaintiff's counsel, on cross-examination, at pages 657-662 of the record, and produced the contract for the inspection of

counsel. He also testified concerning it in the Kane-Milton interference at page 472 of the Exhibit Book.

At page 571 of the record, Mr. Milton explained the circumstances under which he gave his testimony in the interference case of *Kane v. Milton*, as follows:

“Q. Now, tell us under what circumstances you came to testify in that case.

A. Previous to my giving the actual testimony Mr. Williams had written me—Mr. Lynn A. Williams had written me about doing this. I was very, very busy at the time and simply could not spare the time to get up any information on it or give the time to the taking of the testimony. Time drifted along until one day I was in his office on some other business and he asked me if I could not—when I could do it.

Q. When you could do what?

A. When I could give my time for taking of this testimony. I told him I simply could not see my way clear to giving any time in the immediate future, because we were just in the midst of moving our plant—having moved our plant from Detroit to Cleveland and getting established, and my time was needed in my regular work to the exclusion of everything else. He asked me if he could not take it that day. I had an engagement at 6 o'clock, leaving town that night, and he asked me if he could not take it right then, that it would not take very long, and I agreed to give it to him. I happened to be in his office. I hadn't any record and none of my letters.”

This testimony of Mr. Milton is in accord with that which he gave in his interference deposition itself (Vol. II., 468-473), the concluding question and answer of which deposition was as follows (Vol. I., p. 473):

“Q. 10. Will you please state why you have not given your testimony in this interference at an earlier date?

A. When I was first asked to give my testimony by Williams, Bradbury & See, we were just in the pro-

cess of moving the entire factory and offices of the Motor Ignition & Devices Company to Cleveland, Ohio. This was later followed by the moving of my family and household effects, which consumed a good deal of energy. Simultaneously with this work, I had to do a great deal of very important traveling for my company. Following this I was ill and confined to the house for an extended period. I have not been actively connected with the Webster Manufacturing Company or the Webster Electric Company for at least five years. I have been completely occupied with business entirely separate and distinct from any Webster interest for the entire period that I have been away from them and had completely dismissed from my mind the apparatus and business affairs of the Webster companies, and at the immediate moment I am giving this testimony by a chance appointment and did not come here prepared with any of my personal records. I may add that I am giving this testimony at the request of the attorneys for the Webster Electric Company, and that is necessarily hurried owing to the fact that we had a very short period in between appointments that pertain to my active business, and at this moment I am several minutes past due on my next appointment, immediately following which I am to catch my train for Cleveland, Ohio."

In his testimony in the present case (Rec., 573) he testified regarding his deposition in the interference case as follows:

"Q. How long a time were you occupied in giving your testimony in that case?

A. According to my memory it was about an hour or an hour and a quarter.

Q. Did you subsequently find any other papers, or make any other investigation or search for papers?

A. The matter dropped entirely from my mind at that time—

Q. That is, of giving your testimony?

A. Of giving my testimony. They sent me a copy to sign, which I signed and forwarded, and until I got a letter from— No, I don't remember of any-

thing occurring after that until in the testimony of this last year, last November or the 1st of December, this last year, I first learned that the interference had been decided in favor of Kane.

Q. What did you do then? How did you learn that?

A. I was at Racine, Wisconsin, on some other work, and met you, Mr. C. C. Bulkley, and was introduced to you by Mr. Emil Podlesak, and we had dinner together and you informed me of the proceedings, and asked me what I knew about them, and I was very much interested to know the way the thing had developed.

Q. Did you subsequently make an effort to find any other or further papers in connection with this matter?

A. I agreed—I promised you that I would look through my drawings again and you—

Mr. Williams: That you would do what?

A. Look through my drawings again, which I did, and I was not impressed that I had anything of any information—that would contribute any definite information on the subject until—well, the matter was dropped then for the time being and along in December, later, Mr. Bulkley came to Cleveland on an appointment which was arranged by Mr. A. H. Bates, of Cleveland, and met him in the evening, and spent a couple of hours with him—which I did. At that time we made a review of the case in the presence of Mr. Bates, and during this review he read the testimony as it was given from the records.

Q. Whose testimony do you remember was read?

A. The testimony of Mr.— It wasn't the complete testimony; just extracts from Mr. T. K. Webster's, Mr. E. J. Kane's, Mr. Chiville and Mr. Abbott Munn.

Q. Had you read or heard read that testimony before?

A. Never heard of it before.

Q. Proceed.

Mr. Williams: What was that last?

The Witness: I never heard of it before.

Mr. Bulkley: Q. What did you do after that interview with me and Mr. Bates?

A. I did quite a little bit of thinking. I felt that a great injustice had been done me. I felt that my record in the Patent Office had been besmirched and proceeded to hunt up my correspondence.

Mr. Williams: What was the last?

Mr. Bulkley: Q. What did you do after that interview with me and Mr. Bates?

Mr. Williams: I object to that last answer as to his inner feelings.

The Court: He said he did a lot of thinking, that is all right.

Mr. Williams: I don't know how it is competent as evidence.

The Court: He is pointing out what he did and why he did it.

The Witness: I thought that I might be able to set right what appeared to be wrong to me in that testimony.

The Court: In your own testimony?

A. In that testimony as it was read to me by Mr. Bulkley.

The Court: The testimony of the others.

A. Yes, I remember that I had written—that I had a considerable lot of correspondence with Mr. Teagle, and Mr. Alexander. Mr. Alexander was the former patent attorney for the Webster Manufacturing Company. I looked up my files on that and I came across some other files and I thought they might have something in them. And the more I went through the files the more records I found that would refresh my memory and also what I thought would tend to right some of these statements that I thought were wrong, in the other letters that have been offered here to-day, so I told Mr. Bates what I had found. At that time I didn't want to come to the case here and be a witness. I wanted to give my testimony in Cleveland.

Mr. Williams: I object to what he wanted to do. If he will confine himself to facts.

The Court: Yes.

Mr. Williams: If he will tell all that he said and did, that will be better.

The Witness: This is an unusual proceeding for me and I don't know what the limits are. If I overstep them I hope to be corrected.

The Court: I will correct you, if necessary.

Mr. Bulkley: Q. Then what did you do?

A. In what respect?

Q. After you had discovered this evidence, this correspondence.

A. I brought them here to Chicago and exhibited them in Mr. Lynn Williams' office to you and Mr. Williams and some other attorneys jointly. That was the end of the case, which was January 13, 1919."

As appears from this testimony, Mr. Milton never knew the outcome of the Kane-Milton interference until a date shortly before the trial of the present case.

At page 576 of the record Mr. Milton describes the design gotten up by Chiville under his direction which so closely resembled that shown in Kane's alleged sketch, Exhibit No. 17, that the latter appear to be a reproduction of it, as heretofore explained, and on the following page he testifies regarding the criticism which Kane alleges Milton made of the drawing, Exhibit No. 18, when Kane showed it to him, saying that he has no recollection of anything of the kind, and, besides, that there would have been no foundation for such criticism. We have heretofore shown that there was nothing whatever on the drawing, Exhibit No. 18, itself, without additional explanation, which could have prompted such criticism on the part of Milton, whether well founded or not, and that Kane admits that he had no other conversation with Milton regarding the drawing and offered him no explanation of it. (*Supra*, pp. 50-52).

At page 584 of the record, referring again to the decision of the Harvester Company not to permit the magnetos to be any longer attached to the boss on the engine, Mr. Milton testifies:

"Now, Mr. Milton, going back again to the conversation which you had with Mr. Webster, when you learned that the Harvester Company would not permit the use of the boss any more for the attachment of the magneto, when did that conversation occur with

reference to the time that you commenced to work with Mr. Kane?

A. Oh, it was prior to that time. You, of course, have reference to the time when I started Mr. Kane to make the design.

Q. Yes, sir.

A. On this unitary structure."

On cross-examination, at page 599 of the record, referring to a conversation which one of plaintiff's counsel, Mr. See, had with him with reference to his testimony in the interference case, Mr. Milton testified:

"Q. Did you on May 8, 1916, tell Mr. See that the pencil drawing on white paper signed 'E. J. Kane, April 11, 1909,' is a design that Kane worked out at that time, and that you remembered distinctly Kane submitting it to you?

A. I don't think that the thing was put up to me in just that way, or if I made my statement in just that way. I would say, as I have said here, *that that design was worked out under my direct instruction, and I remember the preceding designs that went ahead of that, and I remember how that thing was developed, and I remember the next stage from that.*"

At pages 607-8 of the record he was cross-examined regarding what occurred at the time his deposition in the interference case was taken, in an effort on behalf of plaintiff's counsel to show that he knew what the witnesses on behalf of Kane had testified to before giving his own deposition, as follows:

"Q. Don't you remember that we showed you at the same time, not a printed copy, but the typewritten copies of the testimony given by the other witnesses, that is, Kane and his witnesses, just before you testified?

A. If you did, I did not read them because this whole thing was done in a very short period, probably an hour or an hour and a quarter.

Q. They were there and you were told before you

finally testified at any rate what the testimony of Kane and Munn and T. K. Webster and these other parties had been, had you not?

A. If it had been told me it was not told to me in such a way that I could remember and repeat it.

Q. You were explicitly given the opportunity by us at the time you testified on that very day, were you not, the opportunity to go over all of the testimony that had been given by Kane, and by his witnesses, and to refute it or rebut it in any way that you could. That is true, is it not?

A. I do not recall having seen the copies of it, or even if they had been there I could not have taken time at that particular hour to have done it, and I mentioned to you, or before I went into Mr. McCaleb's office in connection with that, that I did not quite understand this sort of proceedings any way, where you could represent both sides of the case. I thought the thing was largely in your own hands.

Q. What both sides did you refer to in saying that?

A. Kane's side and Milton's side; that I felt whatever effort that I might make, that I would be absolutely helpless and the thing would be as you wanted it and so mentioned it.

Q. To me?

A. Yes, and you said that you would put the facts up to the Patent Office and let them decide. That was your answer. I remember that very distinctly."

At page 610 of the record, cross-examined in reference to the search which he made among his papers prior to testifying in the interference case, he testified as follows:

"Q. You were very confident, were you not, when we first began to make this search, that we were going to find the things that would settle the matter beyond any question, in the form of papers?

A. It has been my—

Q. You told me that, didn't you?

A. It has been my usual experience that any well defined truth could be proven, and I felt that way about this.

Q. Aside from that, you told me, didn't you, that we were almost certainly going to find papers that would corroborate what you had told me as to the date of the invention and your having made it?

A. I felt so sure, and I no doubt so stated it to you."

At page 620 of the record, cross-examined about the particular construction of the yoke of the first magneto that was built, heretofore explained, he testified:

"Q. This four-piece yoke that you referred to in your testimony, how many of those were made?

A. One—or two.

Q. When was that?

A. Right at the beginning.

Q. Now, Mr. Milton, after this machine like Plaintiff's Exhibit No. 15, had first been tried out, and after it had been submitted to the Harvester Company, and tested and approved by the Harvester Company, what was next done with the machine, in so far as its commercial development is concerned?

A. Why, the Harvester Company proceeded to make the castings, all of the iron castings, and electrodes, and everything—

Q. And what did the Webster Company do—

A. (Continuing)—and everything, except the magneto proper, with the yoke, the magneto rotor, and shaft, and the springs, and the studs for supporting the springs. That was all we had to do.

Q. Now, what did you have to do with the manufacture of those devices, yourself?

A. I personally superintended it, and watched the tests on it, as it came through.

Q. When did you do that?

A. Daily.

Q. How?

A. Daily.

Q. Well, when? During what time?

A. It had been continuous from before that; all during the entire production I kept a very close watch of all that work."

With respect to the sending of the first magneto to the Harvester Company at Milwaukee, and the previous test of it, soon after its completion, on the engine at the Webster plant, Mr. Milton testifies at page 637 of the record:

“Q. Then let me ask you again: The first machine was sent to Milwaukee to be tested, was it not?

A. Yes.

Q. Now, when was it sent there?

A. It was sent there very shortly after—

Q. No. What is the date, the month?

A. Well, now, I am fixing it. Very shortly, after when Mr. Kane, Sr., Mr. Cavanaugh, and Mr. Stewart were at the Webster Company, which I think was sometime in, early, in May.

Q. So that it was early in May that that machine was sent there for test, was it?

A. That is my remembrance of it.

Q. Now, after that you did not see the machine there? You did not talk with any of the Harvester people about it yourself? You did not see any written reports from anyone about it, did you?

A. I do not recall those written reports. I may have seen them, and I may have been over to the Harvester Company and talked to Mr. Cavanaugh.

* * * *

Q. And you do not know when they finished their tests there in Milwaukee, do you?

A. They made tests, and they were continuing to test the thing for a long period. I do not know what you would call a finished test.

Q. Weren't you concerned or interested?

A. Absolutely, all the while, and am yet.”

Mr. Milton was cross-examined at length with respect to the date at which the Harvester Company gave a formal “approval” of the new design. He said that he had no knowledge or recollection respecting any such formal approval by the Harvester Company, but that he considered it approved from the date when the magneto was exhibited to Mr. Kane and Mr. Cavanaugh and Mr. Stewart on the engine at the Webster plant, concerning which Mr. Milton testified as follows (p. 638):

“Q. That approval was then early in May, you say?

A. That is my remembrance of it.

Q. That was the approval by Maurice Kane and Stewart and Cavanaugh?

A. Exactly.

Q. Did they place any order for anything, any machines?

A. No order.

Q. Who did place the order finally?

A. I do not know.

Q. Weren't you concerned as to whether you got an order?

A. Intensely so, yes, sir.

Q. Have you got anything to show anything about the receipt of that order?

A. Nothing.

Q. Or do you know anything about when it came?

A. Nothing.

Q. Or how or where?

A. I have a very strong remembrance that there was very considerable pressure put on me to get out machines, as soon as this thing was disclosed.

Q. By whom?

A. By the Harvester people, generally, I think—

Q. That was early in May they put that pressure on you, was it?

A. I would say immediately following that. I won't say it was early in May, but I think, if my other assumption was right, this is right, that it was early in May.

Q. Now, you say that Maurice Kane and Cavanaugh and Stewart saw the first of these machines like Plaintiff's Exhibit No. 15 run here in Chicago early in May, don't you?

A. I say according to my best knowledge—

Q. Yes.

A. —it was about that time.

Q. Yes. Early in May. Now, that is the first one that type that any of the Harvester people had ever seen, is it not?

A. That is the first time that any of us saw it, was right about that immediate time.

Q. Now, how early in May was it that they saw that?

A. I think it was so early in May that it may have been the first day; it may have been even the latter part of April, because we worked very continuously on it; I do not think it took us more than two days or two weeks to get the thing out."

The documentary evidence in this case—Mr. Webster's letter of April 29, 1909, to the Harvester Company, and the photograph enclosed with it—show that the test in question did in fact occur during the latter part of April.

Cross-examined at pages 639-640 respecting the date of the early work on the magneto, Mr. Milton testifies:

"A. The first letter of Mr. Webster, of April 16, 1909, and the time,—that letter was written immediately following my request to him to get an engine for this purpose. That is my anchor on this date.

Q. That is what you anchor your testimony to?

A. Yes.

Q. And by the tenth of May, notwithstanding the fact that it was early in May that the first one, sample of one of these machine was ever shown to any of the Harvester people at all, by the tenth of May you wrote Mr. Webster that you had been so overwhelmed getting out machines, of this new live business' type, that you could not attend to something else? That is your testimony now, is it not?

A. My testimony is that the interruption of the inventory, and the—

Q. No, but the live business, the first—

A. (Continuing) —demands of the Harvester Company,—that may have been only five machines; they were new, and special, and we did not have complete tools for it, and it was some job to get out even one of them.

Q. And it was that 'live business,' that is, the getting out of these five, that the Harvester Company was telephoning and telegraphing and writing letters about, was it?

A. That is my knowledge of it today.

Q. Have you got a single one of those letters or telegrams?

A. Not one.

Q. Have you tried to locate one of them?

A. I have not gone out and looked for those, but I have been through my files at that date, and did not find one.

Q. Have you talked with any of the representatives of the Harvester Company, in preparing to give your testimony here, Mr. Lord, or Mr. Kimbark, or any of the people connected with the Harvester Company?

A. The only person connected with the Harvester Company that I have talked to was Mr. Merwin, with reference to this subject.

Q. Have you made any effort at all to get a single one of the letters or telegrams referred to in your letter of May 10th, which you now say were written in the effort to procure the shipment of these new devices, like Plaintiff's Exhibit No. 15?

A. Those were company records, and they are evidently in the Webster files, and therefore I made no effort to try and find them; I do not suppose it would have done me any good if I had.

Q. Well, why not?

A. Because, the evidence and the knowledge of this thing, that has been used, has been used as the Webster Company's representatives wanted to use it."

At page 654, cross-examined respecting some of the statements made in his testimony in the interference case, Mr. Milton testified:

"A. That is the testimony which I gave without referring to any of these records that I now have before me—I have had before me—

Q. Any of them?

A. I say, these records that I have used to fix these dates by.

Q. Which records are you using to fix those dates?

A. Mr. Webster's letters particularly.

Q. Did you find among any records through which you have been searching recently any drawings made by Mr. Kane other than these two or—well,

any drawings made by Mr. Kane, tracings made by him?

A. None at all.

Q. All the other drawings relating to this low tension magneto work which you have been able to find were made by parties other than Kane?

A. Yes.

Q. The only two made by Kane were those two which were produced by him and which have his date and name signed to them, April 11, 1909, and April 14, 1909?

A. *The one of April 14, 1909, is the one that I remember Mr. Kane making very specifically under my instructions.*

Mr. Williams: That is not the question, and I ask the answer be stricken out.

Q. What I am asking you, or what I mean to ask you is this: Whether all of the drawings that you now know anything about relating to this low tension magneto work of the Webster Company, whether those two are not the only two so far as you know which were made by Kane.

A. That are in existence today, that I have?

Q. Yes, that you know of now, as being in existence.

A. That I know of, yes, but I haven't access to the Webster Company files."

It could hardly be expected that Mr. Milton's testimony, where it conflicts with that of plaintiff's witnesses, would be found corroborated in the record by documentary evidence from the files of the Webster Company, to which Mr. Milton had no access, nor by the testimony of witnesses still in the employ and under the influence of plaintiff, such as Mr. Munn; but it is corroborated by the testimony of a number of wholly disinterested witnesses, in no way connected in interest with either plaintiff or defendant or Mr. Milton. One of these is Albert C. McCarthy, whose testimony appears at pages 615-620 of the record. Mr. McCarthy was in the employ of the Webster Company for fifteen years—1903 to 1918—and at the time Mr. Milton became connected with the company he was in charge of the

gas engine department. Concerning his first acquaintance with Mr. Milton, the instructions he received from Mr. Webster regarding him and his work, and the work which he subsequently did or had done for him in his department on magnetos, Mr. McCarthy testified as follows:

“Q. Did you ever know John L. Milton?

A. Very well acquainted with him.

Q. How did you first become acquainted with him?

A. Why, Mr. Webster introduced me to him in his private office.

Q. What did he say to you, when he introduced you to him?

A. He says, ‘This is Mr. McCarthy; this is Mr. Milton.’ And I shook hands with him; and he says, ‘I want you to take Mr. Milton around the plant’; he says, ‘I have hired him—’ he says, ‘to look after this magneto that we have here.’ And, after taking him around, he says, ‘I guess he can find his way back.’ As near as I can remember, those were his words.

Q. Did Mr. Webster say anything to you about taking instructions from Mr. Milton?

A. Not at that time.

Q. When was that? What did he say subsequently with reference to that?

A. Well, Mr. Milton, I think, went to work a few days afterward, at the point, and Mr. Webster called me in, and told me that anything that Mr. Milton wanted, to get it out for him, and get it out quick.

Q. In connection with that?

A. And let anything else go, if it interfered with his work.

Q. Did he specify the kind of work that he wanted you to do for Mr. Milton through your department?

A. No.

Q. Let me ask you, were you at that time at the head, of what department, of the Webster Manufacturing Company?

A. The engine department. We built gasoline engines.

Q. The machine work?

A. We built gasoline engines, yes, sir.

Q. Did you have in your department the work of making patterns, and castings?

A. No. Only metal patterns.

Q. Only what?

A. Metal patterns.

Q. Did you do the machine work, in your department?

A. Oh, yes.

Q. Did you ever, through your department, do any work for Mr. Milton?

A. Yes; I done all of Mr. Milton's work up to the time that they afterward made a department by itself.

Q. What kind of work was it that you did for Mr. Milton in your department?

A. Well, magneto work. The magneto, the low tension magneto, we called it.

Mr. Williams: Q. What is that? I did not hear.

A. Magneto work, for low tension magnetos.

Mr. Bulkley: Q. Did you know anybody about the Webster—Did you know anybody about Mr. Milton's department, by the name of Abbott Munn?

A. Yes, I know him very well.

Q. Well, what did he do?

A. Mr. Munn really was Mr. Milton's assistant.

Q. Did you ever know anybody in and about the magneto work, with Mr. Milton, by the name of Kane?

A. I did not remember him. I recognized him this morning, when I was introduced to him.

Q. Did you ever do any work for him, in connection with magnetos?

A. No.

Q. Did you ever do any work for Mr. Munn?

A. Yes; that is, Mr. Munn would come to me with instructions that Mr. Milton wanted his work done; and I would get it out for him.

Q. Did you ever know of this Mr. Kane, Joe Kane, in connection with this magneto work that was being conducted by Mr. Milton?

A. No, I do not."

On cross-examination, at page 618, he testified:

“Q. Well, did you understand from Webster or from Milton that he was going to do some experimental work?

A. Yes, sir.

Q. And that you were told, as I understand it, then, when ever he wanted any machine work done, for you to give a man, and do it?

A. That is it, exactly.

Q. But you continued to run the department, of course?

A. Yes, sir.

Q. He had nothing to do with the manufacture of the engines?

A. No, sir.

Q. Well, then, it was simply, then, a matter of convenience, that he did not have enough work on the magneto to run a whole department by itself, and so Webster gave you to understand that whenever Milton wanted a little job done for this experimental work, to turn over the man and the machinery to him?

A. Yes, sir.

Q. And Munn, you say he was an assistant; did he do machine work himself?

A. I think he did, more or less. He worked right along on the magnetos.

Q. Well, with his hands?

A. Oh, yes.

Q. That is, making parts?

A. Yes, making parts. He was a machinist.

Q. Was he a machinist in your department?

A. Not in my department. You see, I was in the gasoline engine department, and the conveyor machinery was an entirely different department, run under a different head. Mr. Munn worked there for a number of years, and was finally taken from that department to work for Mr. Milton.”

We have heretofore referred to the testimony of the draftsman, Kroeplin, who made the working drawings and the tracing from which the blue print of June 3, 1909, Defendant's Exhibit No. 21, was made, and who testified that he never received any instructions from anyone other than

Mr. Milton in respect to drawings connected with magneto work. On cross-examination, Mr. Kroeplin testified as follows (Rec., 682):

“Q. Do you mean to say it was only Milton’s ideas which you embodied in all of these blue prints marked Defendant’s Exhibits 17, 18, 19 and 21?

A. Yes, sir.

Q. Is that true of this Defendant’s Exhibit 18, this double link machine?

A. I said that I made these three views on this drawing. This view was not made by me.

Q. Well, maybe I didn’t make myself clear. Who originated, so far as you know, the double link scheme shown in this drawing?

A. Mr. Milton.

Q. Now, when was it that you made this Defendant’s Exhibit No. 21 drawing, or, rather, the original tracing from which this is a blue print?

A. I did not make the complete tracing.

Q. Well, the part that you made, when did you do that?

A. Prior to the sixth month, third day, 1909. I cannot recall the date.

Q. How long before that?

A. I cannot recall.

Q. Well, was it within a week before that?

A. Oh, it must have been prior to that, months before that, because these details would not be traced for some time after the parts were made.

Q. That is, the parts of the machine, as I understand it, would be made first, and then after that a drawing such as this Exhibit 21 would be made, is that correct?

A. Yes, sir.

Q. So that you did the drawing after the machine had been made?

A. Parts of this tracing were made by me after the parts were made up.

Q. After the actual physical—

A. Parts.”

Mr. Kroeplin also testifies (Rec., 680) to the fact that he accompanied Kane to Milwaukee when one of Mr. Mil-

ton's magnetos was being sent up there for test, Kane himself having testified to several of such trips, as heretofore pointed out. Mr. Kroeplin stated that he could not say positively "whether it was Mr. Milton or Mr. Webster who sent him to Milwaukee," but that at that time he was working under the direction of Mr. Milton.

Milton's testimony regarding the work which he personally did and directed on the magnetos was corroborated by the testimony of Mr. Anderson, at pages 683-684 of the record, which is brief and to the point and reads as follows:

"Witness stated that he resided in Chicago, had retired from business and was not engaged in any occupation. Was foundry superintendent for Webster Manufacturing Company for 22 or 23 years prior to 1910, severing his connection with the company at the time it removed from Chicago to Tiffin, Ohio. Knew John L. Milton. Took orders from him in regard to magneto castings. Did not remember the exact time, but it was some time before the removal to Tiffin. No one gave witness orders to receive instructions from Mr. Milton regarding castings. Witness was one of the stockholders of the company and knew the capacity in which Mr. Milton was hired. It was as an expert gas engine man, hired to get up a magneto. Witness made castings in accordance with his instructions. Could not say definitely how many times, but perhaps twenty-five or fifty times. Witness was opposed to the making of the castings because they interfered with his other work, and so expressed himself to Mr. Milton. Witness thought he might be able to identify some of the castings he made for Mr. Milton. Was shown Exhibit 15 and then Exhibit 12, and said: 'Yes, these are very familiar. I think that—I am quite sure that—we made this, both this casting here and this. That is 15 and 12—that is the bracket on each of them.' Witness did not make any castings for magnetos except in accordance with instructions given to him by Mr. Milton, and never heard of anybody by the name Kane while witness in the employ of the Webster Company. Witness knew

Mr. Munn but received no instructions from him regarding castings for magnetos. Asked if Mr. Milton bothered him a good deal about the castings, witness said: 'Oh, no. He would come down there perhaps just before the blast went on, or just before we started up, and coax us to get it in that day.'

Exhibits 15 and 12 referred to by the witness as embodying bracket castings made by him for Mr. Milton are plaintiff's Exhibits of the unitary plug and bracket construction which Kane claims to have designed and which Munn claims to have made without any assistance from Milton and apparently without his knowledge! The witness did not know Kane, and never received any instructions about castings from Munn, or from anyone else except Milton. It would be interesting to know where Munn got his casting for Kane's first magneto, which he built, according to his testimony, without Milton's knowledge.

Kane's story, starting with his alleged sketch of the Sunday afternoon, was artfully prepared, but, like all such stories, it will not stand careful analysis and investigation. He contradicts himself, as we have seen, and various parts of his story are wholly inconsistent with established facts. He is squarely contradicted on important matters by some others of plaintiff's own witnesses, notably Mr. Webster, as well as by defendants' witnesses. His story, on the face of it, is incredible, and the record demonstrates its falsity. He has not only failed to sustain the burden of proof that was upon him, as the later applicant and patentee, but he has not even produced a preponderance of evidence in his favor.

We submit, therefore, that plaintiff was right in originally and for years recognizing Milton as the inventor or originator of the subject matter in controversy, in holding him out as the inventor of it, in marking its product patented with the date of his patent, in asserting it against infringers, and in wholly ignoring any claim of Kane's, or apparently having any idea that he had one. It did all of

this with full knowledge of every fact on which it now relies to destroy Milton's patent and discredit him as the originator of the subject matter in question, and to establish Kane in his place for the purpose of extending in time and broadening in scope the monopoly which it held under Milton's patent. It is too late for plaintiff to make this entire change of position for its own profit and to the prejudice of the public in general and defendant-appellant in particular, even if there were much more evidence than there is to support it. It should be held to its original claim to the invention through Milton, and its belated claim to it through Kane should be rejected.

CHAPTER D.

The Manning-Van Deventer Letter.

Much stress was laid by the plaintiff-petitioner, throughout the progress of the trial below and in the argument on appeal, upon a letter written by Mr. Manning to Mr. Van Deventer, in relation to the prospective or possible acquisition of the patents and rights of the Podlesaks by the Splitdorf and Sumter Companies. While this matter was entirely disposed of by the Court of Appeals in its decision (p. 72 main portion of brief) and no mention has been made thereof since that decision—either on the petition for re-hearing or in the petition for writ of certiorari, it would seem advisable for defendants to devote some time to a discussion thereof. This letter, which was much exploited by the plaintiff, in its opening statement of its case and later (Rec., 478, 499), will be found at pages 242-244 and again at pages 305-307 of the Vol. II., where it forms a part of the depositions of Mr. Manning and Mr. Van Deventer taken prior to the trial of the present case in a suit of *Emil Podlesak v. Webster Electric Company* in the Eastern District of Wisconsin, said depositions having been introduced into the record of the present case by plaintiff as its Exhibits Nos. 81 and 82. (Vol. II., pp. 153, 274). At the

time the letter in question was written (August 10, 1915) Mr. Manning was vice-president and secretary of the Sumter Electrical Company, of Sumter, South Carolina, but residing and representing it at Chicago, while Mr. Van Deventer was treasurer and general manager of the Sumter Company, and located at Sumter.

As appears from the letter itself, Mr. Manning had recently had an interview with Mr. Henry J. Podlesak at which Mr. Podlesak told him of his and his brother's relations and contracts with the Webster Company and stated that they were free to manufacture their magnetos themselves and to transfer their patents with the right of manufacture to others, in view of which Mr. Manning said to Mr. Van Deventer that if their company could secure the Podlesaks' rights it "would let us right into the Webster business, and with their line and plug oscillator we sure would be in shape to command the field." This latter statement constitutes the gravamen of the letter, as we understand plaintiff's view and that of the court below, but it seems to us a harmless and immaterial statement which should not have been allowed to prejudice the defendant in the pending litigation in any way whatsoever. If it was a fact that the Podlesaks' contracts with the Webster Company were such as to leave the Podlesaks free to manufacture the same magnetos which the Webster Company was manufacturing under the contracts, and if the Podlesaks had the right to assign such contracts and right to manufacture to another, certainly no just criticism could be offered of anyone who acquired such rights and proceeded to manufacture such magnetos. As a matter of fact, however, the Podlesak's contracts with the Webster Company gave them no right to either themselves manufacture, or to assign to others the right to manufacture, the particular type of magneto which the Webster Company was manufacturing under such contracts, for the contract, Exhibit C, gave the Webster Company the *exclusive* right to use the inventions covered by the patents mentioned in that contract, and those patents covered broadly the so-called "Tri-

Polar" type of magneto which the Webster Company was then manufacturing under the contracts, and which it has ever since continued to manufacture, and which it has exploited in its catalogues and advertising matter as the distinguishing feature of its magnetos. (See copies of plaintiff's catalogues in evidence, and the fifteen samples of its advertising matter offered in evidence, collectively, as Defendant's Exhibit No. 70). Neither the Splitdorf Company nor the Sumter Company has ever manufactured a tri-polar magneto of any kind, nor in any other way copied or imitated the design of plaintiff's magnetos. There is not the slightest evidence in the record, and we believe no claim on the part of plaintiff, that the defendants have been guilty of any unfair competition in that respect, the sole complaint being that the Splitdorf and Sumter companies acquired the rights of the Podlesaks (whatever they were) with a full and express recognition of all the rights of the Webster Company under the latter's contracts with the Podlesaks, and proceeded to exercise the rights so acquired (whatever they are) in a perfectly fair, businesslike and legal manner.

Plaintiff, in its voluminous and frequently revised and amended pleadings in this case, has characterized the Podlesaks' sale and assignment of their patents and contract rights to the Splitdorf and Sumter companies, subject to all of the rights of plaintiff, as an outrageous and actionable "conspiracy" against plaintiff, but in view of the actual facts and the legal rights of the parties, and the full recognition of such rights throughout the transaction, such charges would seem puerile, and made solely for the purpose of endeavoring to prejudice the mind of the court against the defendant—an effort which appears to have been successful in the court below, for in no other way can we account for its conclusions.

Mr. Manning was called as a witness by the plaintiff and examined at length respecting the letter in question. With regard to what he meant by his reference to "Webster's latest move" he testified as follows (Rec., 479):

"Q. Now, what was the latest move, Mr. Manning, that is referred to in that letter? What did you mean when you wrote that?

(Objection; overruled).

A. There was a move that was made at Newark, when you and Mr. Brown went down to Newark and told the general manager of the Splitdorf Company that you had certain patents that would dominate the Dixie high tension magneto principle, and that you were going to push, or sue them for infringement, or something of the sort, if they did not insist on my getting out of this stationary engine field up here, to which the Webster Company were developing some business, in connection with their Webster oscillator; and I did not like the idea of feeling that I should be ejected from that field, when I knew I had a perfect right to work in it, and I had spent a good many more years than anybody else in the stationary engine ignition field, in developing magneto ignition for those engines, and I did not see what right you would have in going down there and making a threat like that, with Mr. Curtis, and trying to throw me out of this stationary engine ignition field, when we had certainly, as I understood, a perfect right to sell and manufacture and prosecute all the business we could in that particular line."

With respect to what he meant by letting his company "into the Webster business," he testified at page 489 of the record as follows:

"Q. When in this letter you say that 'H. J. and Emil will be in the frame of mind to consider such negotiations with us as would let us right into the Webster business,' what did you mean by letting yourselves right into the Webster business?

A. Well, I meant that if we bought any rights which they had under the machine, that Mr. Podlesak showed me and which he was preparing to manufacture, that in addition to our line of oscillators it would give us the right also to manufacture a Podlesak bracket like he showed me, a magneto known as the Sylvan, as he called it, and that that magneto

was very similar to the Webster magneto; and that we would then not only have the right to manufacture the plug oscillator to ourselves but the other type of machine as well, if not the tri-polar magneto as Mr. Podlesak had explained to me that Mr. Webster had the exclusive license on it.

Q. When you referred to letting yourselves into the Webster business, you were referring, as I see it, to yourselves?

A. As I said—

Q. Just a minute. When you say here that—When you refer to letting yourselves into the Webster business, I understand you now to say that you meant this Sylvan machine which the Podlesaks had gotten up, which he showed to you.

A. I simply mean this, Mr. Williams: It would let us into the field which they were occupying with another type of magneto than our own; we had the plug oscillating magneto with the springs in the bracket, and using the rotary type on the bracket so that we made an oscillator, and things of that kind. If we had the Sylvan machine, we would then be in position also to have a machine that would be of a different type from the plug oscillator we had with the springs on the bracket of the magneto—I mean, on the plug itself. But I should have said there—I mean, I could have expressed my meaning, I think, more clearly had I said the Webster field rather than the Webster business.

Q. That is, you could let yourselves right into the Webster field?

A. Yes, in the field. You know, those are terms that are used by salesmen very often without considering their technical significance,—As meaning class of trade that they were handling, the stationary engine field.

Q. And it was in your mind that you could go into that field or that line of business with this Sylvan machine, with the plug or oscillator? That is, that the Sylvan machine would put you in position to cater to that trade?

A. We were already catering to that trade; we were handling it very satisfactorily. But our machine was different entirely from the Webster machine,

and if, for any reason, we wanted to manufacture both types of machine, why, we would then be in position to do so. But as a manufacturer, I naturally would not want to manufacture two types of any model that one type would handle, because we understand in a manufacturing business you want a large production in as few models as possible.

Q. Do you mean to say that your plug oscillator would fill the same market exactly as the Webster machine if you had seen fit to use it for that purpose?

A. It was already filling a field which was in competition with the Webster machine, selling to the same customers for use on the same machines.

The Court: That is, salable to them for the same purpose?

The Witness: It would be salable to any manufacturer of stationary engines just as the Webster machine and as any other magnetos are interchangeable.

Mr. Williams: Q. So that where you referred here to letting yourselves right into the Webster business, you mean letting yourselves into the same market?

A. Yes.

Q. Putting yourselves in the same market?

A. Yes. In other words, with a different type than we already had.

Q. So that you would have the two types to cater to the same market?

A. Exactly so."

In reference to what he said in the letter about keeping the Podlesaks themselves out of the field, he testified at page 483 as follows:

"Q. Now, in this letter you said, 'I think I have scared H. J. pretty well out of the idea of manufacturing his own new machine.' What machine was referred to there?

A. He showed me an oscillating magneto, on which there was a magneto, and he called it 'Sylvan,' I think; and he said that that was the machine that he and his brother were preparing to manufacture,

and I was very anxious to eliminate that additional competition in that field, and as Mr. Podlesak told me that he was making arrangements to go into the manufacture of this line of oscillating magnetos, and as I realized that would be another competitor in that field, I was particularly anxious to get rid of the Podlesak brothers' competition. Later it was agreed that they would stay out of that field entirely for a number of years."

And further, on the following page:

"Q. What did you tell Podlesak about the size or strength of the organization?

A. I do not remember now any of the conversation, but I know that was the impression that I was endeavoring to create, because I wanted to keep him out of that field. As it was, there was the Webster Chicago Company, and ourselves,—the Webster Company manufacturing the Webster oscillator magneto, and the Sumter Company manufacturing the plug oscillator, as we called it; and we had the so-called Van Deventer machine, with the springs mounted on the bracket, and using a different type of magneto from the Webster machine; and I always did feel that if we could secure these rights from the Podlesaks, which I understood they had, which gave them the right to manufacture a machine similar to Webster, that, as I stated later in the letter, if Mr. Brown got too obstreperous, he wanted to eject me entirely from this field, that I would then be in position to manufacture, in addition to the plug oscillator, a machine similar to the Webster, without using a different magneto,—as I think I understood from Mr. Podlesak that the Webster Company had an exclusive license on the tri-polar magneto, and of course I could not see anything wrong in going ahead with those negotiations, because they owned the patents, and they told me that their rights would be clearly set forth in the agreements which they had with the Webster Company, and which of course our lawyers could see whenever it was necessary."

As will be noted, Mr. Manning repeatedly says that Mr. Podlesak told him that the Webster Company had an *exclusive* license under the Podlesak tri-polar patents, and that he therefore had no idea of using that feature of the Webster's Company's magneto. Again, on page 491 he says:

"Mr. Podlesak had made it very clear to me that he could not manufacture the Webster machine."

As will also be noted, Mr. Manning said in one of his foregoing answers:

"I could not see anything wrong in going ahead with those negotiations, because they (the Podlesaks) owned the patents, and they told me that their rights would be clearly set forth in the agreements which they had with the Webster Company, and which of course our lawyers could see whenever it was necessary."

Those agreements were submitted to Mr. Manning's company and its lawyers, and when their contract of purchase of the Podlesak patents and rights was drawn up those agreements were expressly referred to and recognized, and the whole transaction was perfectly straight and clean. The contracts showed exactly what the rights of the parties were, there was no misrepresentation by anyone, the Splitdorf and Sumter Companies acquired all of the rights of the Podlesaks, and the defendant is here resting on those rights. Mr. Manning could see nothing wrong in the transaction, nor can we.

Mr. Manning and Mr. Van Deventer were both called as witnesses by the Webster Company in the suit in the Eastern District of Wisconsin heretofore referred to, and examined, or rather cross-examined, as if they were a pair of thieves and pirates by the Webster Company's counsel in that case. We can hardly expect the court to read these lengthy depositions, notwithstanding plaintiff has injected them into the present case, but we very much wish that it

might read them and contrast the evident character and disposition of the witnesses with that of examining counsel. We feel sure that nothing more could be needed to satisfy the court of the honesty and integrity and high character of these two representatives of the defendant companies, charged with the alleged "conspiracy" against the plaintiff.

Instead of the equities of the case being with the plaintiff, because of the Manning-Van Deventer letter and any of the matters to which it relates, we submit that they are altogether with the defendants; that the plaintiff has no ground whatever for criticising or complaining of the sale and transfer of the Podlesaks' patents and rights to the defendant company; and that its own conduct, in respect to the Kane-Milton and Kane-Podlesak interferences and its prosecution of the Kane application represents an unconscionable effort on its part to over-reach the defendants and the public as well, in violation not only of all moral right but of well established legal principles.

IN THE
Supreme Court of the United States

OCTOBER TERM, A. D. 1921,

No. 520.

ON PETITION FOR WRIT OF CERTIORARI TO THE CIRCUIT
COURT OF APPEALS FOR THE SEVENTH CIRCUIT.

WEBSTER ELECTRIC COMPANY,
Petitioner,

vs.

SPLITDORF ELECTRICAL COMPANY.

BRIEF FOR RESPONDENT.

Respondent would not consider any reply to the petition necessary but for the fact that it wholly fails to set forth the facts of the case upon which the decision sought to be reviewed was based. The record is a voluminous one of nearly a thousand printed pages, besides a printed Interference Record which accompanies the main record as an exhibit. The petition

and accompanying brief contain no references to the record, and will lend the Court no assistance in examining it to determine what the facts of the case are. We shall, therefore, endeavor to briefly state them, with appropriate references to the record, in this reply, and to show that the case was decided upon familiar principles of the patent law often applied by this Court as well as the inferior courts, and not upon any new and unprecedented defence as asserted in the petition and the accompanying brief.

The defense upon which the two claims of the Kane patent which were in issue were held invalid was, broadly, that of laches, and was predicated upon the fact that the claims in question were not introduced into the application for the Kane patent until more than eight years after the filing of the application, and nearly nine years after the subject-matter of the claims had been introduced into extensive public use by interests adverse to Kane and not claiming to act under any right or license from him, and about the same length of time after the subject-matter of the claims had been disclosed in a patent issued to another party; and when the claims were finally introduced into the application (no similar claims having been previously embodied in it), they were admittedly and avowedly introduced for the purpose of dominating constructions disclosed in patents issued to others, under which the defendant in the present case was licensed and operating. Indeed, startling as the statement may seem, the claims in question were not introduced into the application for the Kane patent *until three years after the present suit was begun*, the original bill having been based upon other patents (the Podlesak patents), and the Kane patent having been

brought into the case by supplemental bill after its issue more than three years after the filing of the original bill.

A more gross and inexcusable case of laches, and a more inequitable attempt to overreach the public in general and the defendant in particular, by the introduction of claims into a pending application for the purpose of dominating and suppressing devices which had been patented to others and gone into extensive public use many years prior to the introduction of such claims, has rarely come before the courts; and the facts presented bring the case squarely within the rulings of this Court in such familiar cases as *Railway Co. v. Sayles*, 97 U. S. 554, 563; *Hobbs vs. Beach*, 180 U. S. 383-396, and a multitude of rulings of the inferior courts following those and other leading cases in this Court. The specific facts of the case also seem to bring it within the ruling of this Court in the recent case of *Chapman vs. Wintroath*, 252 U. S. 126, but its disposition on the defense of laches is in no way dependent upon the application to it of the ruling in that case

THE FACTS OF THE CASE.

The application for the Kane patent was filed in the Patent Office on February 2, 1910. (Rec., Vol. 2, p. 502.) As filed, it contained no description of the subject-matter of Claims 7 and 8, which were introduced into it eight years later, under the circumstances above described, *and no claim in any way directed to or towards such subject-matter*. (See claims at pp. 514-520). Indeed, it may well be questioned (and there was earnest controversy over it in the courts below) whether the Kane application as filed contained any

adequate *disclosure* of the subject-matter of Claims 7 and 8 subsequently introduced into it, such disclosure being entirely dependent upon such information as might be gleaned from the very obscure and inadequate drawings of the application.

The patentee Kane, called as a witness on behalf of plaintiff, admitted on cross-examination that he never intended to disclose or claim the subject-matter of Claims 7 and 8 as any part of his invention at the time he explained his invention to his attorney and gave instructions regarding the preparation of his application. On the contrary, he testified that he did not consider it an invention at all, but a mere matter of design, and so stated to his attorney. (Rec., Vol. I, pp. 277-278, 281.) Thus, at p. 278, referring to the subject-matter of Claims 7 and 8 and to his interview with his attorney at the time he placed the preparation of his application in his hands, Kane testified:

“Q. You did not consider it of very much importance; is that right?

A. It seemed to me a matter more of design than importance—invention.

Q. Is that what you told him?

A. Yes, sir.

Q. And you told him that you thought it was not an invention, and was a mere matter of design? You told that to Mr. Sprinkle, did you, when you went to him to get a patent?

A. I told him it was a good means and preferred means of fastening the magneto on the engine.

Q. Well, I ask you if you told him that you thought it was a mere matter of design, and not an invention.

A. I possibly did, yes.”

And at the bottom of page 281:

“A. I told Mr. Sprinkle that combining this plug and the casting on it I did not think there was any invention in that.”

The subject-matter of Claims 7 and 8, therefore, was not only not disclosed or claimed as any part of Kane's invention in his application as originally filed, but he had no thought or intention of disclosing or claiming it as any part of the invention which he desired and intended to patent. The invention which he thought he had made, and which he instructed his attorney to describe and claim as his invention in the application he was to prepare, related to an entirely different subject—to a so-called automatic cut-out, to which the claims of his application were directed. (Rec., Vol. II, pp. 514-520.)

The claims of the Kane application were repeatedly rejected and amended during the four years following the filing of the application (pp. 522-540), and on April 18, 1914, the two claims remaining in the application were finally rejected on references of record (p. 540).

On October 24, 1914, Kane submitted an amendment to his application by which he sought to introduce into it six claims copied from a patent which had been issued to one Milton on May 12, 1914, stating in the “remarks” accompanying the claims that:

“The above claims taken from patent No. 1,096,048, granted May 12, 1914, to J. L. Milton, 1 to 6 verbatim thereof, are sought to be entered in accordance with the provision of Rule 68.

Applicant has just discovered that this Milton patent has been granted, and the claims are entered for the purpose of securing an interference with said patent.”

(Rec., Vol. II, pp. 541-544.)

No one of these claims, copied from the Milton patent and sought to be introduced in the Kane application, related in any way to the subject-matter of Claims 7 and 8 subsequently introduced in the Kane application. The Milton patent did, however, contain a full and complete *disclosure* of the subject-matter of said Claims 7 and 8, as did also an earlier British patent which Milton had obtained upon the same structure, dated October 28, 1909, and bearing No. 24,838 of that year. (Rec., Vol. II, pp. 397-403.) Plaintiff (petitioner) owned Milton's invention, or controlled it under a contract of purchase with him, and had been operating under it from a date prior to the filing of Milton's British application. It began the manufacture and commercial introduction of the Milton magneto (disclosed in his British and later in his American patent) on an extensive scale in the summer and fall of 1909 and continued the same thereafter without interruption, advertising it as Milton's magneto and representing it as being of his invention or production.

When Kane sought to amend his application by introducing into it six claims copied from Milton's American patent, as above stated, the Patent Office Examiner refused to admit the amendment for a number of reasons (pp. 550-551), and advised the applicant that if he desired to contest an interference with Milton on the claims in question he should embody them in a divisional application. Accordingly, on January 14, 1915, Kane filed a divisional application embodying the six claims copied from Milton's patent, and no others (pp. 622-632). The prosecution of Kane's original application, on the two rejected claims relating to the "automatic cut-out," was continued, and the claims ultimately secured by appeal (pp. 552-

621), and a patent issued to Kane upon the application, bearing No. 1,204,573, and dated November 14, 1916 (p. 917).

As before noted, the claims copied from Milton's patent and embodied in the divisional application filed by Kane on January 14, 1915, did not relate in any way to the subject-matter of Claims 7 and 8 subsequently introduced into such application. Therefore, up to and including the time of the filing of his *divisional* application, which was practically five years after the filing of his *original* application, Kane made no claim whatever, of any kind, broad or narrow, relating to the subject-matter of Claims 7 and 8 which were introduced into his application three *additional* years later.

On March 24, 1915, the Examiner rejected one of the six claims of Kane's divisional application (Vol. 2, p. 633), and in response to this rejection Kane on April 17, 1915, presented an argument in support of the patentable novelty of the claim, and in addition presented nine new claims copied from a then recently reissued patent of one Podlesak, dated February 9, 1915, and bearing No. 13,878 (Vol. II, pp. 634-639). With reference to these claims Kane's attorneys said (p. 639):

"Applicant has noted the Examiner's reference to the Podlesak patents Nos. 1,098,052 and 1,055,076. Applicant also notes that the patent No. 1,055,076 was reissued as reissue No. 13,878 of February 9, 1915. A careful consideration of the claims of the reissue patent would indicate that Claims 13 to 15, inclusive, and Claims 19 to 24, inclusive, read equally as well upon applicant's structure as upon the structure shown in the Podlesak patent. As applicant's original applica-

tion, of which the present application is a division, was filed long prior to the filing date of the original, applicant has incorporated these claims in the present amendment, and asked that they be entered, and that an interference with Podlesak, as well as with Milton, be declared as soon as practicable."

Certain of these claims copied from the Podlesak patent and thus introduced into Kane's divisional application (Claims 10, 11 and 12), related to the subject-matter of Claims 7 and 8 subsequently introduced into Kane's application, being narrow or specific claims directed to such subject-matter. Thus Claim 10 included the salient and distinguishing feature of Claims 7 and 8 as

"An integral bracket upon and in which all of the aforesaid mechanism is mounted,"

Claim 11 referred to it as

"A unitary bracket comprising a body in which the relatively fixed and movable electrodes are mounted and a shelf extending laterally therefrom and integral therewith upon which the said generator is mounted."

Claim 12 refers to the same feature as

"An integral bracket having a body in which the said electrodes are mounted and a shelf laterally extending therefrom and upon which the said generator is mounted."

These three claims constituted Claims 19, 20 and 21 of the Podlesak reissue patent No. 13,878 (Rec., Vol. II, p. 911), and were specific claims to the same sub-

ject-matter that was later more broadly and generically claimed in Claims 7 and 8 subsequently introduced into the Kane application.

The Patent Office Examiner rejected all nine of the claims copied from the Podlesak reissued patent and sought to be introduced into Kane's application by this amendment, upon the ground that there was no foundation for such claims in the disclosure of the Kane application (p. 642). In response to this rejection, Kane's attorneys filed a long argument in support of the assertion that Kane's application did contain a sufficient disclosure of the subject-matter of the claims to warrant their introduction (pp. 649-656), and from the refusal of the Examiner to admit the claims finally took a petition to the Commissioner of Patents (pp. 660-664), to which the Examiner replied (pp. 664-665), which petition was denied by the Commissioner (p. 665). Following such denial, Kane filed an amendment to his application by which he introduced into it new descriptive matter (pp. 656-657), and then took a further petition to the Commissioner (pp. 670-672), which was replied to by the Examiner (p. 672), and denied by the Commissioner (p. 673).

Following these proceedings Kane, on October 18, 1915, filed a further amendment (pp. 675-678) by which he introduced still further new descriptive matter into his specification, being that now appearing at lines 69 to 75 on page 1 of the patent as issued (p. 933), and all the matter now appearing at lines 35 to 104 on page 2 of the specification of his issued patent (p. 934).

Following these amendments, the claims in question were admitted and an interference with the Podlesak reissued patent was declared (pp. 679-682).

The proceedings in this Kane-Podlesak Interference are not printed in the main record (where they would naturally follow page 686), but are contained in a certified copy of the printed record of the interference as presented to the Court of Appeals of the District of Columbia, which is in evidence as defendant's Exhibit No. 56. Reference will be made to it as the Interference Record.

Upon the filing of the preliminary statements of the parties it was found that Kane's filing date was earlier than Podlesak's claimed date of invention, whereupon a rule was issued upon Podlesak (in accordance with usual Patent Office practice) requiring him to show cause why judgment should not be rendered against him. (Intf. Rec., 127.) Podlesak thereupon moved to dissolve the interference (which he had not sought) upon three grounds, as follows:

First, that Kane had no right to make the claims in issue because of laches on his part, the claims not having been presented by him for more than two years after the issue of the original Podlesak patent, and not until sometime after the issue of the reissued patent.

Second, that the claims, properly construed, were not readable upon Kane's disclosure.

Third, that if the claims in issue were to be construed broadly enough to be readable upon both Podlesak's and Kane's disclosure, they were met by the prior art. (Intf. Rec., 127-131.)

This motion was supported by a brief filed on behalf of Podlesak and printed in the Interference Record referred to (pp. 132-137).

The motion was denied by the Examiner of Interferences, upon a report by the Law Examiner (pp. 138-

43) and Podlesak appealed to the Board of Examiners-in-Chief. (p. 144.)

This appeal was taken on April 5, 1916, and on April 20, 1916, plaintiff-petitioner purchased the Kane application and its attorneys were substituted for those previously employed by Kane by a power of attorney from him bearing the last mentioned date. (Rec., Vol. 2, pp. 684-686.)

On Podlesak's appeal above referred to, the Board of Examiners-in-Chief reversed the decision of the Examiner of Interferences, upon the ground that Kane was barred by his laches from making the claims in question, under the decision of the Court of Appeals of the District of Columbia in *Rowntree v. Sloan*, 227 O. G., 744, the opinion of the Examiners-in-Chief being found at pages 161-162 of the Interference Record.

Kane acquiesced in the decision of the Examiners-in-Chief with respect to the first three counts or claims of the interference, but appealed to the Commissioner in respect to the remaining counts. (Intf. Rec., 162, 163.) The Commissioner affirmed the decision of the Examiners-in-Chief, but based his decision upon the ground that the claims in question were not readable on Kane's disclosure (Intf. Rec., 174-176) whereupon Kane appealed from the decision of the Commissioner to the Court of Appeals of the District of Columbia (p. 176).

The Court of Appeals affirmed the decision of the Commissioner and Examiners-in-Chief in favor of Podlesak, in an opinion found at pages 700-702 of Vol. 2 of the main record; basing their decision both upon the ground of Kane's laches in making the claims in question and upon the ground that they were not readable upon his disclosure.

Following the decision of the Court of Appeals, the Patent Office Examiner rejected the nine claims which have been involved in the Podlesak Interference, but allowed to Kane two claims of very much broader scope than any involved in the interference, which were presented by an amendment to Kane's application filed on June 7, 1918, and accompanied by an argument of Kane's new counsel (petitioner's counsel) making reference to an oral interview held by them and by plaintiff's general manager with the Examiner. (Main Rec., Vol. 2 pp. 687-693.)

These new claims, which became claims 7 and 8 of the Kane patent as finally issued, were not open to one of the objections upon which the other nine claims had been finally rejected and cancelled, to wit: that they were not readable upon Kane's disclosure, since they were so broad and general in their terms that they were readily readable upon both that disclosure and Podlesak's, and dominated the latter and the more limited claims directed to it.

They were, however, open to the objection that Kane was not entitled to make the claims because of laches, upon which ground the Board of Examiners-in-Chief had rejected the claims which Kane had copied from the Podlesak patent, and which was one of the grounds upon which the Court of Appeals had affirmed that rejection. In other words, after the Examiners-in-Chief and the Court of Appeals of the District of Columbia had both held that Kane had no right to make the more specific claims on the Podlesak patent, because of laches, the Primary Examiner allowed to him two very much broader claims *directed to the same subject-matter*, these latter claims having been presented for the first time by an amendment filed *five years*

after the issue of the original Podlesak patent disclosing their subject-matter, *and more than eight years after the filing of Kane's application.*

Plaintiff held a license under the Podlesak patent whose claims it sought to take away from Podlesak and appropriate to itself in the Kane-Podlesak Interference (Rec., Vol. 1, pp. 52-57), in which it expressly admitted the validity of the patent, and in which it was further expressly covenanted and agreed that the parties to the license contract:

"will aid and assist each other in the prosecution of said application and the obtaining of patents thereon *and in any interference proceedings relating to their right of priority to said invention* and in any suit or proceedings brought under any of said patents." (p. 53.)

Plaintiff's acquisition of the Kane application and its prosecution of the interference with Podlesak was therefore not only a violation of this covenant, but it was a direct attack upon the validity of the claims of the Podlesak patent, under which plaintiff was licensed, and whose validity it had expressly admitted in the license contract, such prosecution of the interference involving, as it did, an assertion of priority of invention of the subject-matter of such claims by Kane.

After acquiring the Kane application on April 20, 1916, as heretofore noted, plaintiff proceeded to carry on the interference which had been previously declared between the Kane application and the Milton patent (Rec., Vol. 2, pp. 362-500). Inasmuch as plaintiff owned or controlled the Milton patent and had been operating under it from the date of Milton's invention, its acquisition of the Kane application gave it control

of both sides of the Kane-Milton interference, and from that date the prosecution of the interference on behalf of both parties was carried on by plaintiff's attorneys, with the result that priority of invention was awarded to Kane, and the claims which had been copied from Milton's patent and introduced into Kane's application, as heretofore noted, were allowed to Kane and now appear in the Kane patent in suit as Claims 1 to 6.

RÉSUMÉ.

The situation which resulted from the proceedings which have been reviewed, therefore, was as follows:

1. Plaintiff secured, in a second patent, the same identical claims which it had secured four years earlier in its Milton patent, thus prolonging its monopoly under those claims by that length of time.

2. After an unsuccessful effort to secure, for itself, nine claims of the Podlesak patent under which it held a license, and whose validity it had both impliedly and expressly admitted—an effort which it carried, by successive appeals, all of the way to the Court of Appeals of the District of Columbia—it secured in the Kane patent two claims of very much broader scope than the claims which it sought to take from Podlesak, which additional claims were introduced into Kane's application for the first time more than eight years after the filing of the application, nearly nine years after their subject-matter had been disclosed in Milton's British patent, and nine years after plaintiff, operating under Milton's invention and his American application and patent, had introduced the claimed invention into extensive public use. Indeed, three years after defendant's devices, against which the claims are as-

serted in the present suit, had been placed on the market, and nearly that length of time after the present suit was filed.

What plaintiff in effect accomplished was to re-issue its Milton patent, with broad claims to subject-matter not in any way covered by the claims of the original patent—claims which it could not lawfully have made in a reissue application—and at the same time extend the period of the monopoly of the original patent four years.

THE LAW—AUTHORITIES.

The decision of the Court of Appeals of the District of Columbia in the Kane-Podlesak interference denying Kane's right to Podlesak's claims because of laches was based in part upon its rulings in earlier cases such as Rowntree vs. Sloan, App. D. C., Vol. 45, p. 207; 227, O. G., 774, in which it had held that an applicant who failed to present claims for subject-matter disclosed and claimed in a patent issued to another for more than one year after the issue of such patent would be refused allowance of such claims and an interference with the issued patent. The ruling announced in that case was subsequently modified by this court in the case of Chapman vs. Wintroath, 252 U. S. 126, in which this court held that such claims would not be barred unless their subject-matter had been disclosed and claimed in a patent to another issued more than *two* years prior to the filing of the application containing the claims in question. In the instant case Kane's divisional application, in which the claims here in controversy were first presented, was filed on January 14, 1915, and the first claims in any way directed to or towards the subject-matter of

Claims 7 and 8 of the Kane patent as issued were introduced into the Kane application by the amendment filed on April 19, 1915 (Rec., Vol. 2, p. 634). This was more than *two* years after the issue of the Podlesak patent No. 1,055,076, dated March 4, 1913, disclosing the subject-matter of the claims and claiming it in a limited way. If the test of the application of the doctrine of *Chapman v. Wintroath* to the facts of the case is, therefore, the length of time (one year or two years) intervening between the disclosure of the subject-matter in the patent issued to another and the introduction of claims to such subject-matter in a pending application, the present case is not distinguishable from *Chapman v. Wintroath*, and the doctrine announced in that case is applicable to and controlling of it. Whatever may be the view of the court on this point, however, it seems clear that the familiar doctrine of *Railway Co. v. Sayles*, 97 U. S. 554, 563, and the numerous later cases following and applying it, are applicable to and conclusive of the present case, for certainly a more flagrant instance of the broadening out of a pending application and the introduction into it of claims to new subject-matter not previously claimed or indicated to be any part of the invention sought and intended to be patented, for the purpose of dominating and suppressing the use of inventions or devices which the public had been enjoying for years, and in the present instance prolonging in time and extending in scope the monopoly which the owner of the patent had previously held and asserted under another patent, has rarely come before the courts.

After introducing the invention into public use as Milton's invention, and deliberately patenting it as his invention, with full knowledge at the time of all

of the facts now brought forward to show that another was the real inventor, and after advertising and selling the device as "Milton's Magneto," and marking it patented with the date of his patent after the patent issued, and asserting his patent against alleged infringers, plaintiff discovered an opportunity not only to prolong the life of the monopoly which it had been enjoying under his patent, but to widely extend its scope as well, so it acquired Kane's application and succeeded in taking away Milton's claims and repatenting them to Kane by means of an uncontested interference of which it controlled both sides; further attempted, but failed, after carrying its efforts all the way to the Court of Appeals of the District of Columbia, to likewise take away from its licensor, Podlesak, and repatent to Kane, nine claims of Podlesak's patent under which it had been licensed and was operating; and, finally, succeeded in getting through the Patent Office, in defiance and disregard of the decision of the Court of Appeals, two broad claims relating to subject-matter which had not only not been claimed, but which had not been even clearly disclosed in his original application, or in any manner indicated to be a part of the applicant's invention until more than five years after the filing of the application, and a still longer period after their subject-matter had been disclosed in a patent to another and introduced into extensive public use, and which were finally allowed and patented to the plaintiff nine years after their subject-matter had been introduced into public use and placed on sale by plaintiff, operating under the invention and patent of another. Not only so, but the two claims in question were introduced for the first time long after the present suit was filed, and for the manifest

purpose of dominating and controlling the devices and structures of the defendant, at which said suit was directed, which devices were then in extensive public use and on sale.

Surely, there is every equitable and just reason why the ruling of this court in *Chapman v. Wintroath* and the doctrine of *Railway Co. v. Sayles* should be applied with full force and effect to the facts and circumstances of the present case. In *Railway Co. v. Sayles* the court, referring to amendments made to pending applications for the purpose of enlarging their scope, said:

“The law does not permit such enlargements of an original specification, which would interfere with other inventors who have entered the field in the meantime, any more than it does in the case of reissues of patents previously granted. Courts should regard with jealousy and disfavor any attempts to enlarge the scope of an application once filed, or of a patent once granted, the effect of which would be to enable the patentee to appropriate other inventions made prior to such alteration, or to appropriate that which has, in the meantime, gone into public use.”

That such was the exact purpose and effect of the introduction and allowance of Kane's claims now under discussion cannot be doubted. The very devices of the defendant at which the claims are directed in the present suit had been in public use and on sale more than two years prior to the introduction of the claims,—indeed, the suit itself had been pending nearly three years,—so that the purpose and effect of the claims was not only to appropriate that which had, in the meantime, gone into public use at the hands of

the plaintiff, under another invention and patent, but which had likewise gone into public use at the hands of the defendant itself.

In *Hobbs vs. Beach*, 180 U. S., 383, 396, in which the doctrine of *Railway Co. vs. Sayles* was pressed upon the attention of the court in the defendant's behalf, the court declined to apply the doctrine upon the ground that, while there had been an expansion of the original application, such expansion had not been with reference to and had no effect upon anything which had gone into use or been given to the public in the meantime. Referring to the amendments made to the application, and to the machine used by the defendant and known as the Horton machine, the court said (pp. 395, 396) :

"All this was prior to the invention of the Horton machine, which was first put into use in September, 1889. Of course, the amendment of May, 1886, could not have been made with reference to this device. It is true that, in November, 1890, after application had been made for the Horton patent, new specifications and claims were filed, in which the invention was stated much more in detail, and with much fuller and more accurate language than before. But there appears to have been no attempt to expand the original claims for the purpose of including the Horton patent."

After then referring to its prior decision in *Railway Co. v. Sayles*, and quoting the language which we have quoted above, the court continued:

"Had there been any expansion of the original specification and claims subsequent to the introduction of the Horton machine, especially if made with reference thereto, we should not have hesitated to apply the doctrine of that case."

In the case now before the court, on the other hand, Claims 7 and 8 of the Kane patent were introduced into the application three years after defendant's devices, at which the claims are now directed, were put in public use and on sale, and nearly three years after the present suit had been brought—and nine years after the subject-matter of the claims had been introduced into public use and placed on sale by the plaintiff, then operating under Milton's invention and patent. Surely, had the facts of the present case been before the court in the reported case it would not have hesitated to apply the doctrine of *Railway Co. v. Sayles*.

See also:

Steward vs. American Lava Co., 215 U. S., 161.

Kittle vs. Hall, 29 Fed. Rep., 508, 513.

Gunn vs. Savage, 30 Fed. Rep., 366, 368, 369.

Con. El. Light Co. v. McKeesport, 40 Fed. Rep., 21, 26.

Hestonville Co. vs. McDuffee, 185 Fed. Rep., 798, 802.

Gilmer Co. vs. Geisel, 187 Fed. Rep., 606, 610.

United Wireless Co. vs. National Co., 198 Fed. Rep., 386, 395.

Motion Picture Patents Co. vs. Independent Co., 200 Fed. Rep., 411, 414, 416-17.

National Electric Co. vs. Telefunken Co., 209 Fed. Rep., 856, 864-5.

Karl Kiefer Co. vs. Unionwerke, 218 Fed. Rep., 847, 855-6.

CONCLUSION.

As has been stated in the opening part of this brief, while the specific facts of this case bring it within the ruling of Chapman vs. Wintroath, 252 U. S. 126 wrongful acts of Petitioner as herein set forth, render the disposition of this case in no wise dependent upon the ruling in that specific case, but plainly bring it within the well established doctrines governing laches. The decision sought to be reviewed being based on familiar and well established principles of Patent Law was undoubtedly right, and therefore this petition for writ of certiorari should be denied.

EDWARD RECTOR,
DAVID B. GANN, '
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MAR 3 1924

WM. R. STANSBURY
CLERK

Supreme Court of the United States

OCTOBER TERM, 1923.
No. 33.

WEBSTER ELECTRIC COMPANY,
Petitioner,

vs.

SPLITDORF ELECTRICAL COMPANY,
Respondent.

BRIEF
BY
EDWIN J. PRINDLE
AS AMICUS CURIAE.

FILED BY LEAVE OF THE COURT.

INDEX OF AUTHORITIES.

| | PAGE |
|---|--------------------|
| Browning <i>v.</i> Johnson, 50 App. D. C., 335; 271 F. R., 1017 | 10 |
| Chapman, <i>et al.</i> <i>v.</i> Wintroath, 252 U. S., 126 | 3, 7, 8, 9, 10, 19 |
| DeFerranti <i>v.</i> Harmatta, 50 App. D. C., 393; 273 F. R., 357 | 7, 8, 10, 17 |
| Fritts, In re, 45 App. D. C., 211, etc. | 4 |
| Hayes-Young Tie Plate Co. <i>v.</i> St. Louis Transit Co., 137 Fed. Rep., 82 | 25 |
| Leonard <i>v.</i> Everett, 52 App. D. C., 90; 281 F. R., 594 | 9 |
| Mahn <i>v.</i> Harwood, 112 U. S., 354 | 17 |
| Miller <i>v.</i> The Brass Co., 104 U. S., 354 (1881) | 12, 17 |
| Ransdell <i>v.</i> Jahns, 51 App. D. C., 3; 273 F. R., 365 | 8 |
| Replogle <i>v.</i> Kirby, 50 App. D. C., 210; 269 F. R., 862 | 8 |
| Rowntree <i>v.</i> Sloan, 45 App. D. C., 207, etc. | 5, 6, 7, 13 |
| Victor Talking Machine Co. <i>v.</i> Brunswick- Balke-Collender, <i>et al.</i> , 290 F. R., 565 .. | 10 |
| Wahl <i>v.</i> Main, 51 App. D. C., 398; 280 F. R., 974 | 9 |
| Wells <i>v.</i> Honigman, 50 App. D. C., 99; 267 F. R., 743 | 9 |
| Western Electric Co. <i>v.</i> Sperry Electric Co., 58 F. R., 186 | 24 |
| Wintroath <i>v.</i> Chapman & Chapman, 47 App. D. C., 428, etc. | 6 |

IN THE
Supreme Court of the United States.

WEBSTER ELECTRIC COMPANY,
Petitioner,

against

SPLITDORF ELECTRICAL COMPANY,
Respondent.

No. 93—October
Term 1923

BRIEF
of
EDWIN J. PRINDLE
AS AMICUS CURIAE.

This brief is written because the decision of the case at bar will involve the determination of a rule of law which is a matter of large public importance.

The writer of the brief has no other interest in the case than the public welfare and has no relation to either party in the suit, nor any interest in any case which could be affected by the decision thereof.

In the case at bar, there will be presented to the Court for determination a rule as to the time within which an applicant for patent may copy claims from a patent granted to another, and may test the question of priority of inventorship of said claims. This brief is

directed solely toward the determination of that rule, in the public interest.

In the case at bar, Kane filed an original application on February 2, 1910, on which Patent No. 1,204,573 was granted on November 14, 1916. Podlesak was granted patent No. 1,055,076 on March 24, 1913. Kane filed a divisional application January 14, 1915, upon which Patent No. 1,208,105 was ultimately granted September 24, 1918. Podlesak applied for a reissue of his patent December 23, 1914, and reissue Patent No. 1,387,878 was granted February 9, 1915. On April 17, 1915, more than two years after the grant of the Podlesak original patent, but less than two years after the reissue patent, Kane copied three claims from the original Podlesak patent and six from the reissue patent into his divisional and demanded an interference. The Court of Appeals of the District of Columbia finally decided the interference against Kane, basing its decision, both on Kane's laches in copying the said claims and demanding the interference and on the further ground that the claims were not readable upon Kane's disclosure. Kane acquiesced in this decision, and on January 17, 1918, filed an amendment by which he introduced two new claims, 7 and 8, which were broader than, but generic to, the claims which he had copied from the Podlesak patents. These claims were allowed without interference and the patent No. 1,208,105 granted, as above stated.

Kane's divisional application was filed within two years after Podlesak's original patent was granted. Claims 7 and 8 were filed five years after Podlesak's original patent was granted and two years and four months after his reissue patent was granted.

The Amicus Curiae, desiring only to aid in the settlement of the principle involved, does not refer to the showing of the record for or against laches, acquiescence, abandonment, etc.

This Court in *Chapman, et al. v. Wintroath*, 252 U. S., 126, decided that an applicant who has pending in the Patent Office an application disclosing, but not claiming, an invention claimed in a patent granted on an application filed during such pendency is within his rights in filing a divisional application for such invention within two years after the granting of said patent and copying claims therefrom for the purpose of interference.

This Court, however, has not had before it for determination the question of how long after a patent is granted an applicant may copy claims of such patent for the purpose of interference in an application which was pending at the time of the granting of said patent or was filed not more than two years after said granting.

The reasons for limiting the time within which an applicant may copy claims from a patent for purposes of interference are two:

First, the applicant, by obtaining a second patent would extend the time of monopoly of the invention during which the public would have to wait for an opportunity to use it, and unreasonable delay in obtaining the grant of such patent would cause the public to pay tribute or put off the time when it would become public property for an undue length of time; and

Second, to prevent possible injustice to the patentee who may have put the invention on the market or made preparations therefor.

Two rules for the determination of this question successively have been applied by the Patent

Office and the Court of Appeals of the District of Columbia.

The first rule has been that the applicant must copy the claims from the patent within a reasonable time under all the circumstances of a particular case and in the light of the terms of the statute.

The second rule has been to set a fixed time within which all applicants must copy the claims from the patent regardless of any circumstances in the case.

The first recorded cases adopted the first of these rules. They were:

Barber v. Wood, 207 O. G., 299; 1914 C. D. 1.

Shreve v. Grissinger, 202 O. G., 951; 1914 C. D. 491.

In re Fritts, 45 App. D. C., 211; 227 O. G. 742; 1916 C. D. 188.

The Fritts application was filed in 1880, and it was not until 1916 that claims were copied therein from patents which had previously expired, so that a second monopoly of 17 years was sought. The Court of Appeals of the District of Columbia denied the right to claims copied from the patents, saying:

“It was his duty within a reasonable time after the issuance of those patents to assert his claims thereto, to the end that an interference might be declared and the issue of priority determined. By failing to assert such claims, he must be held to have abandoned them.”

The second rule, setting a fixed period after the grant of a patent, after which period no applicant

might copy claims from the patent for purposes of interference, was first adopted in the case of *Rowntree v. Sloan* by the Court of Appeals of the District of Columbia, the decision being reported in 45 App. D. C., 207, 227 O. G., 744; 1916 C. D. 192. The period set was one year.

The decision in *Rowntree v. Sloan* was doubtless influenced by the fact that at that time (1916) the Patent Office was engaged in an active campaign to prevent the practice of wilfully causing applications to remain in the Patent Office for long periods while an art grew up, and to shorten the period of prosecution and reduce the number of such applications. In this case the Court was doubtless influenced by a desire to aid the Patent Office in the said campaign, and accordingly fixed the period within which Sloan should have copied the claims as "at least within the time allowed for amendment after Patent Office action", which is one year.

In 1917, subsequent to the decision in *Rowntree v. Sloan*, Commissioner Ewing decided the case of *Wintroath v. Chapman and Chapman*, 248 O. G. 1003; 1918 C. D. 9. In that case Chapman and Chapman filed an application for patent in 1909, during the pendency of which Wintroath filed an application in 1912, which eventuated in a patent on November 25, 1913, the Chapmans' application having no claims which conflicted with the Wintroath application. About 20 months later, June 6, 1915, the Chapmans filed a divisional application, in which claims of the Wintroath patent were copied and an interference declared between it and the said patent. Wintroath contended that, because of the Chapmans' delay of nearly 20 months in filing their divisional application after

the publication of the Wintroath patent, they had lost their right to contest the priority of the claims, in view of the decision of the Court of Appeals in *Rowntree v. Sloan* (*supra*).

Commissioner Ewing held that the period should be less than two years and, drawing an analogy with the rule in reissue cases, said:

“The rule therefore would set a period of two years as a limit below which delay would not be inquired into and beyond which it must be satisfactorily accounted for.

Under this rule, the Primary Examiner should deny the right of an applicant to make a claim taken from a patent where the period of delay exceeds two years and declare an interference only where a *prima facie* case overcoming the charge of dilatoriness is made out by the applicant.”

Thus, Mr. Ewing, in effect, favored a rule requiring only reasonable promptness under all the circumstances of each particular case, and the time limit of two years which he mentioned was only a time within which the right to make the claims could not be questioned. It seems to the writer that Mr. Ewing would not have mentioned a definite time limit had not the Court of Appeals already fixed a definite time limit in *Rowntree v. Sloan*. He probably felt that he was bound by the holding that there should be a time limit and sought by suggesting two years, to soften the harshness of the one-year rule.

The Court of Appeals of the District of Columbia in

Wintroath v. Chapman & Chapman, 47
App. D. C. 428, 1918 C. D. 154, 248 O. G.
1004,

in deciding the appeal from Commissioner Ewing, refused to accept his suggestion and followed its decision in *Rowntree v. Sloan*, *supra*, saying:—

“We therefore adhere to the rule in the *Rowntree case* but with this modification: The period should be one year unless the applicant shall satisfy the Commissioner that the delay was unavoidable.”

The case was brought to this court on *certiorari* as

Chapman et al. v. Wintroath, 252 U. S. 126.

This court decided that the Chapmans were within their legal rights in filing their divisional application containing claims of the Wintroath patent at any time within two years after the publication of that patent, and that the right to make the application cannot be deemed lost by laches or abandonment merely because of a delay not exceeding the two years allowed by the Statute.

Since the decision of the Supreme Court, the following decisions have been rendered by the Court of Appeals of the District of Columbia in cases in which an applicant has copied a claim of a patent published during the pendency of his application, in which the two years' limit permitted by the Supreme Court for filing divisional cases was applied to the copying of claims from a patent, for purposes of interference:

DeFerranti v. Harmatta, 50 App. D. C. 393, 273 F. R. 357, 1921 C. D. 226, 288 O. G. 205.

In this case a patent was issued to one Rietzel July 20, 1909, from which Harmatta copied claims

which led to an interference resulting in an award to Harmatta, to whom a patent was issued December 3, 1912. DeFerranti first made the claims in issue July 29, 1913, which was more than four years after the Rietzel patent but less than two years after the Harmatta patent. The Court held that DeFerranti was estopped to make the claims against Rietzel, saying:

“The limitation of two years within which claims may be taken from a patent arises from the application of a sound principle of public policy for the prevention of an undue extension of monopoly by procrastination in the assertion of adverse rights against one already in possession. This situation is not different by analogy from a reissue case where the public is in adverse possession. In both instances, the applicant has stood by and permitted others to assert rights which he now negligently seeks to monopolize for himself.”

Ransdell v. Jahns, 51 App. D. C. 3, 273
F. R. 365, 1921 C. D. 228, 288 O. G. 206.

In this case, the Court held that Jahns, being well within the two year period which it had recently fixed by its construction placed upon the rule in *Chapman v. Wintroath* (252 U. S. 126), was not estopped to contest an interference with the patentee.

Replogle v. Kirby, 50 App. D. C. 210, 269
F. R. 862, 284 O. G. 380, 1921 C. D. 138.

The Court held that Replogle, who filed his application more than two months after the granting of the patent to Noguchi, assignor to Kirby, and who copied claims of the patent more than a year thereafter, was not estopped from making

the claims in view of the decision of the Supreme Court in *Chapman v. Wintroath, supra*.

Wells v. Honigman, 50 App. D. C. 99, 267 F. R. 743, 1920 C. D. 242, 280 O. G. 590.

It was here held that a renewal application, although filed 23 months after the filing of the original application, is entitled to the benefit of the filing date of the original application as a constructive reduction to practice, notwithstanding the fact that another had obtained a patent during the period of forfeiture, there being no proof of fact of abandonment of the invention, the Court citing the Supreme Court decision in *Chapman v. Wintroath, supra*.

Wahl v. Main, 51 App. D. C. 398, 280 F. R. 974, 1922 C. D. 133, 303 O. G. 398.

Wahl failed to make the claims of Main's patent until four and a half years after the issue of that patent. No excuse being offered by Wahl for his delay in copying the claims, he was held estopped to make the claims in view of the holding of the Supreme Court in *Chapman v. Wintroath* above cited.

Leonard v. Everett, 52 App. D. C. 90; 281 F. R. 594, 304 O. G. 232; 1922 C. D., 142.

It was held that where an applicant copies apparatus claims of a patent within two years after the grant of the patent, but not more than two years after the invention of the patent has been in public use, he is not estopped, and that where he is entitled to make the apparatus claims he may also make method claims notwithstanding a delay

of more than two years in copying such latter claims after the patent has issued, where the method was an inherent part of the apparatus and anyone using the apparatus must use the method, the Court citing the Supreme Court in *Chapman v. Wintroath*, *supra*.

Browning v. Johnson, 50 App. D. C. 335,
271 F. R. 1017, 1921 C. D. 203, 287 O. G.
785.

In this case, the Court of Appeals of the District of Columbia held that where the patentee derives the invention from the applicant, there was no question of diligence and neither the patentee nor his assignee can charge the applicant with lack of diligence or laches.

Victor Talking Machine Co. v. Brunswick-Balke-Collender et al., 290 F. R.
565.

In this case, which was an action following interference proceedings in the Patent Office which were the subject of the decision in *Browning v. Johnson*, *supra*, the action being to have claim 1 of the Browning patent adjudged invalid and void under R. S. U. S. 4904, 4909, and 4915, the Court comments on the proceedings in *Browning v. Johnson* on pp. 574-575.

As shown by the above case of *DeFerranti v. Harmatta*, there have been three factors influencing the Court of Appeals of the District of Columbia in its selection of a fixed period of two years, after which, if an applicant copies claims from a patent for the purposes of interference, he will be held to have lost the right to such claims

by laches or abandonment in the absence of special circumstances excusing the delay.

These factors are :

First, the protection of the public from an undue extension of the monopoly ;

Second, the preservation of rights of a patentee already in possession from the attack of an applicant who has procrastinated in asserting adverse rights ;

Third, a supposed analogy between delay in copying claims from a patent for purposes of interference and an application to broaden claims by reissuing a patent in which latter case this court has fixed a period of two years unless good excuse for further delay be shown.

Where an applicant intentionally or deliberately delays the issuance of his application for patent by failure to copy the claims of a patent and to demand an interference thereon, the aim is to permit the art to grow up and then to lay it under tribute, and the time when the invention becomes free to the public is in effect delayed beyond the seventeen years contemplated by the statute. Where it is clear that this has been done intentionally, the attempt should be frustrated by the application of the equitable doctrines of limitation, within the terms of the statutes, or the finding of abandonment concerning which there is no statutory limitation.

Since, however, the object of the patent system is to induce inventors to produce inventions, by granting them adequate protection for their inventions, the public good requires that the remedy adopted for frustrating the inventor who overreaches shall not be such as to injure inven-

tors who do not overreach and thus reduce the incentive to inventors in general to invent.

So, also, injustice to the patentee whose claims are copied, due to intentional delay in copying those claims, even though within the statutory periods, and during which the patentee has altered his position to his prejudice, should be prevented.

But the supposed analogy between an applicant who copies claims from a patent for purposes of interference and one who seeks to broaden the claims of his patent by reissuing it needs careful scrutiny.

At the time when the Supreme Court in *Miller v. The Brass Co.*, 104 U. S. 354 (1881) adopted the rule that applications for the reissue of a patent to broaden the claims must be made within two years after the grant of the patent, a very serious situation existed. Patentees frequently waited until other inventors had produced new forms of improvement upon the patented invention and then, with the new light thus acquired, under pretense of inadvertence and mistake, applied for such enlargement of their claims as to make them embrace those new forms. At the time when that decision was rendered, there were roughly 250,000 patents, and of these 10,000 had been reissued, or one patent in every 25. Since that decision, there have been granted roughly 1,200,000 patents, and only 5700 reissues. Thus, only one in every 210 patents have been reissued since the decision in *Miller v. Brass Co.* As that decision did not limit the right of reissue for the purpose of correcting mistakes or narrowing the claims, or making them more specific, and did not interfere with broadening the claims where the application for reissue was filed within two years, the enormous falling off of the proportion of reissues from one in 25

to one in 210 patents following that decision indicates that the abuse which the Court sought to correct was overcome.

But while the abuse of delaying the grant of the original patent by prolonging the prosecution of the application therefor in the Patent Office was of substantial magnitude at the time when the Court of Appeals rendered its decision in *Rowntree v. Sloan*, supra, that abuse has been and is being corrected by means having no harmful reaction upon inventors who are not delaying their applications.

At the time when that decision was rendered, which is the first case in which a uniform period of time was fixed after which every applicant who copies claims from a patent for purposes of interference would be chargeable with laches, the Patent Office under Commissioner Ewing was engaged in a campaign to reduce the number of long-pending applications and to shorten the period of prosecution of applications in general. The Court, in rendering that decision, was doubtless influenced by the desire to assist the Patent Office in its campaign. The means used by the Patent Office was to ask the cooperation of attorneys and inventors, which was frequently willingly given, and to make and strictly enforce a requirement that every amendment of an application for patent should be completely responsive to the last official action under penalty of having the application held to be abandoned, and to keep strict supervision over interferences so as to prevent the declaration of unnecessary interferences and also to prevent dilatory tactics in those which were declared.

The Amicus Curiae has asked the present Commissioner of Patents, Hon. Thomas E. Robertson,

to give a comparison as to length of time of pendency in the Patent Office between the applications before and since that campaign. This he has done in a letter, dated February 5th, 1924, which is printed as a supplement to this brief at p. 26. From this it will be seen that:

NUMBER OF APPLICATIONS PENDING 15

YEARS OR LONGER:

| | |
|--------------------|----|
| Jan. 15, 1914..... | 84 |
| Jan. 1, 1924..... | 36 |

NUMBER OF APPLICATIONS PENDING 10

YEARS OR LONGER:

| | |
|-------------------|-----|
| Jan. 1, 1912..... | 289 |
| Jan. 1, 1924..... | 85 |

NUMBER OF APPLICATIONS PENDING 8

YEARS OR LONGER:

| | |
|-------------------|-----|
| June 1, 1914..... | 799 |
| Jan. 1, 1924..... | 192 |

NUMBER OF APPLICATIONS PENDING 5

YEARS OR LONGER:

| | |
|-------------------|------|
| Jan. 1, 1912..... | 4296 |
| Jan. 1, 1924..... | 1599 |

All of the 36 applications now pending longer than 15 years are involved in interferences. The average time between the date of filing applications and the date of grant of patents is at present about 29 months. This is longer than usual because the Patent Office has fallen behind in its work owing to lack of sufficient force.

As there were pending in the Patent Office on January 1, 1924, 225,000 cases, only 1599, or .007 ~~per cent.~~ of these, had been pending longer than five years and only 192, or .0008 ~~per cent.~~ had been pending longer than eight years.

In 1916 the average time of pendency of applications in the Office was 21 months. Under fairly

normal conditions, the average time may be taken as about 2 years. This average includes the whole period of prosecution and all time after allowance, and there has been taken into the calculation all cases, including those delayed by interference or otherwise. It will thus be seen that the two-year rule would have no applicability to the average case.

The Patent Office has for many years had a regulation under which when an application for patent is ready for allowance, an examination is made of all other pending applications in the same class to see whether any of the claims of the allowable application could be made in any of the said other applications. If it is found that any of those claims could be made in any one of the other applications, the latter applicant is notified of the fact that the claims are being made by another party and informed that, if he wishes to copy them, he must do so within thirty days, under penalty of being held to have abandoned them. This practice effectually prevents delay in making the claims, where the Examiner seasonably discovers that an applicant is entitled to make the claims. The only reasons why it does not in all instances prevent delay in copying the claims are that there are not enough Examiners to thoroughly perform their work and that there will always be some error in every line of human endeavor.

As the Court may know, a very serious effort has been made by the patent bar and the scientific, technical, and industrial organizations of the country to raise the Patent Office from the desperate condition into which it had gradually fallen, partly through failure on the part of the legislature and the public to realize its importance and its needs, and more largely through the war, to

an efficient condition. That movement has succeeded in placing the salaries of the Patent Office where they draw and hold competent patent examiners, and movements within and without the administration and the Congress are now on the way to provide the Patent Office with an adequate number of examiners so that this work can be done with the minimum possible percentage of error, so that the possibility of patents being issued without notice to applicants who are entitled to make them, of claims therein, will be slight.

The American patent bar as a whole is also desirous of reducing the time of pendency of applications in the Patent Office by simplifying and shortening the procedure. For that purpose, the Patent Section of the American Bar Association has appointed a Committee on Patent Law Revision which has tentatively adopted a report proposing amendment to the Statute for reducing the number of appeals, both in interference and *ex parte* cases, and that report has been submitted to the various patent law associations throughout the United States, both national and local, for discussion and suggestion or approval.

Not only, therefore, has the Patent Office itself reduced to very small proportions the evil of delaying applications for patent in the Patent Office, but its present practice, when it has sufficient examiners to adequately carry it out, will usually prevent cases arising under the rule being considered in the case at bar.

The number of instances which, when the Patent Office has sufficient examiners, will exist in which the Patent Office inadvertently issues the patent without notifying the applicant who could have made the claims, and in which applications are

filed after the patent has been issued, and the applicant is not notified promptly of the existence of the patent will be so small as, in the opinion of the Amicus Curiae, to render it very unwise to adopt a remedy which would in any manner be unjust to innocent applicants, and thus decrease the incentive of inventors to invent.

The suggested analogy between delay in copying claims from a patent for purposes of interference and an application to broaden claims by reissuing the patent, which analogy caused the Court of Appeals of the District of Columbia, as stated in *DeFerranti v. Harmatta* (supra), to fix a uniform period of two years, after which an applicant might not make such a claim, is so far from being an exact one as to be inequitable to apply in such cases as the case at bar.

The need for reissue of a patent for the purpose of broadening a claim, being usually ascertainable by the patentee from an inspection of the patent itself, he may well be required generally to make the application for that purpose within two years; and yet, even here, the Court has held that that is not an invariable rule, saying in *Mahn v. Harwood*, 112 U. S., 354-363:

“As we have already stated, no invariable rule can be laid down as to what is reasonable time within which the patentee should seek for the correction of a claim which he considers too narrow. In *Miller v. The Brass Company*, by analogy to the law of public use before an application for a patent, we suggested that a delay of two years in applying for such correction should be construed equally favorable to the public. But this was a mere suggestion by the way, and was not intended to lay down any general rule. Nevertheless, the analogy is an apposite one, and

we think that excuse for any longer delay than that should be made manifest by the special circumstances of the case."

On the other hand, the adoption of a fixed period, after which an applicant may not copy the claim of a patent for purposes of interference, must in effect imply the actual knowledge by the applicant of all patents being granted within the field to which his invention relates during the pendency of his application, or of any divisional application filed not more than two years after his application matures in a patent. Except in the case of large corporations, it is, as a practical matter, usually impossible for an inventor to have such information. The Patent Office issues on an average 750 patents per week. While the drawings of the average patent comprise a number of figures and often very many full sheets of drawings, and while such patents, almost without exception, contain more than one and often very many claims, the Patent Office is unable to publish more than a single figure of each patent and a single claim. It would therefore be impossible for the inventor or his attorney, in most circumstances, to learn from the Official Gazette of the Patent Office whether claims were being patented to others which he should copy.

Except for the Patent Office and a few libraries in the United States, complete sets of all copies of patents are not accessible. Therefore, while the need for reissuing a patent for the purpose of broadening a claim is usually ascertainable from a mere inspection of the patentee's own patent, the knowledge that claims had appeared in an issued patent which an applicant could make is not accessible to most applicants; and for him

to employ an attorney to go to the Patent Office and inspect the 750 patents which are issued each week would involve an expense which is possible only to large corporations.

The Supreme Court, in its decision in *Chapman v. Wintroath* (*supra*), commented on the uncertainty of notice presumed to be derived from the publication of a patent, as compared with actual notice received from the Patent Office, saying:

(At pp. 138-9) "The one-year provision of Rev. Stats., §4898, as amended March 3, 1897, c. 391, 29 Stat. 693, is that an applicant for a patent, who shall fail to prosecute his application within one year after Patent Office action thereon 'of which notice shall have been given' him, shall be regarded as having abandoned his application, unless the Commissioner of Patents shall be satisfied that such delay was unavoidable. But when a conflict between inventions disclosed in applications escapes the attention of the Patent Office Examiners, Rev. Stats., §4909, and a patent is issued, with claims conflicting with the disclosures of a pending application, the applicant receives only such notice of the conflict as he is presumed to derive from the publication of the patent. In the one case the notice is actual and specific, in the other it is indefinite and constructive only. When the great number of patents constantly being issued is considered, many of them of a voluminous and complicated character, such as we have in this case, with many and variously worded claims, such an implied notice must necessarily be precarious and indefinite to a degree which may well have been thought to be a sufficient justification for allowing the longer two-year period to inventors who must, at their peril, derive from such notice their knowledge of any conflict with their applications."

The situation as to filing applications for re-issue of a patent for the purpose of broadening claims is therefore not analogous to the situation being considered in connection with the case at bar, and to follow that rule would be to work great hardship on all innocent inventors and their assignees, and the unjust consequences would fall most heavily on the individual inventor or patent owner, as distinguished from the large corporation.

The *Amicus Curiae* believes the foregoing considerations to clearly show that the rule should not set a fixed time within which all applicants must copy the claims of a patent, but that it should be one requiring that he insert the said claims in his application within a reasonable time under all the circumstances of the case.

The rule suggested would enable the courts to hold that claims had been abandoned, or that the party was estopped to make the claims whenever he had knowingly delayed to make them and wilfully procrastinated, whether the delay was less than two years or was longer than that period, and would enable the court to do strict justice in all cases.

To choose the rule of a fixed period of two years, or any other fixed period, would be in effect to imply that every claim in a patent which literally or in substance, might be found in an earlier patent, and which was not made in the application of the second patent within two years after the earlier patent was granted, was invalid in the second patent. This possibility would substantially decrease the salability of patents and would correspondingly discourage the production of inventions.

The road of the inventor from the time he files his application for patent to the obtaining of a decree sustaining his patent and finding infringement, even where it is clear that the defendant has obviously built upon his foundation, is so beset with obstacles that many who see the opportunity for valuable improvements and are capable of making them refrain from doing so, because of the danger of these unforeseen, and in many instances, unforeseeable defenses which are open to an ingenious, industrious and persistent defendant. The same dangers decrease the value of patents in the eyes of manufacturers or other possible purchasers. To add to such dangers the fact that, unless a patentee discover, within two years, that some claim—and perhaps the most essential claim—to which he is entitled had been made in a patent issued to another, and had not been copied by him within that period, or any other fixed period, would, in the long run, not only deprive many inventors of adequate protection for their inventions, but lay them under tribute, or at least subject them to suit for infringement of the said claim for practising their own invention. This experience would not only embitter the inventor, and I think justly so, but also those who had put money into or bought his rights.

There is a strong tendency on the part of a considerable portion of the public to look upon inventions always as an accomplished fact, and to look upon any curtailment of the inventors' monopoly as so much clear gain to the public, and the courts sometimes tend toward the same point of view. This is perhaps but natural, because such questions only arise in connection with inventions that have already been made, and

knowledge of which is in possession of the public. The real interest of the public and the object of the patent system lie, however, in the inducement to the inventor to go out into the unknown and create or bring into the realm of public knowledge inventions of which the public not only had no knowledge, but which it might never know but for the inducement of the patent system. The future progress of our country depends upon preserving that inducement strong enough so that inventors will invent, and so that they or their backers will risk the sums, often very large, which are usually required to bring an invention to a really useful embodiment.

The inventions produced under the stimulus of the American Patent System have had more to do with the prosperity of our country through the upbuilding of our industries and the multiplying of the hands of the farmer than any other factor. As a single tangible instance, it may be stated that but a small fraction of the vast areas of land which are under cultivation in the United States would be tilled today if it were not for the labor-saving machinery and other inventions with which the American inventor has provided the American farmer. The *Amicus Curiae* asked the Secretary of Agriculture for data on the effect that labor-saving machinery has had on the farmers' ability to produce crops, and his reply of February 8, 1924, is filed with this brief and printed as a supplement at p. 28. From the data therein given, it appears that according to the average practice in the areas where the most machinery is used, the hand method of producing crops would require four times the man-power that is required by the use of machinery. Even in the areas of the country where the most ma-

chinery is used, there is still much labor performed by hand on many farms for which machinery could be used to advantage, and if it were fully used, the number of men required in that area would undoubtedly be less than one-tenth of the number that would be required if the American inventor had not produced that machinery.

The Amicus Curiae telegraphed to the Campbell Farming Corporation of Hardin, Montana, stating that he wished to show how the American inventor has enabled the American farmer to displace hand labor with machinery and requesting them to telegraph him the number of acres in their immense farm and the approximate number of men employed upon it. The Corporation replied:

"APPROXIMATELY SEVENTY FIVE THOUSAND ACRES IN OUR FARM FOR THIS YEAR AND WE EMPLOY APPROXIMATELY THREE HUNDRED MEN IN SUMMER EXCLUSIVE OF MANAGERS AND FOREMEN."

Here then is a wheat farm of approximately 120 square miles which, through the inventions produced by the American Patent System, is cultivated by a force of only three hundred men, or one man to every 250 acres. Copies of the telegrams are printed at pages 32 and 33 of this brief.

centive. The maintenance of our industrial and agricultural supremacy and the security of our future require the full preservation of the incentive to invent. The inducement to produce inventions is now so far from satisfactory that the Amicus Curiae believes it would be dangerous to

knowledge of which is in possession of the public. The real interest of the public and the object of the patent system lie, however, in the inducement to the inventor to go out into the unknown and create or bring into the realm of public knowledge inventions of which the public not only had no knowledge, but which it might never know but for the inducement of the patent system. The fu

therein given, it appears that according to the average practice in the areas where the most machinery is used, the hand method of producing crops would require four times the man-power that is required by the use of machinery. Even in the areas of the country where the most ma-

chinery is used, there is still much labor performed by hand on many farms for which machinery could be used to advantage, and if it were fully used, the number of men required in that area would undoubtedly be less than one-tenth of the number that would be required if the American inventor had not produced that machinery. This machinery has almost wholly been invented by American inventors.

There are available in the United States, even in peace times, but a small fraction of the number of men that would be required if this cultivation were compelled to be conducted by the methods in use before the American Patent System. During the Great War, when millions of our men were withdrawn from agriculture and industry for military purposes, the United States could not have adequately fed itself and Europe would have starved, if it had not been for these same inventions. If necessity is the mother of invention, much more is the American Patent System the father of it. Necessity has always existed, but inventions did not begin to appear in substantial numbers until the creation of the American Patent System.

These inventions have been the direct result of the incentive of the short monopoly held out by our patent system. For we are not naturally more inventive than other peoples. We are Europeans by descent. Our greater inventiveness is a gradual development under the influence of that incentive. The maintenance of our industrial and agricultural supremacy and the security of our future require the full preservation of the incentive to invent. The inducement to produce inventions is now so far from satisfactory that the Amicus Curiae believes it would be dangerous to

further weaken it. The public would lose vastly more in the decreased production of inventions than could possibly be gained by any shortening or weakening of the monopoly.

The two-year rule is open to a further objection that it runs counter to a fundamental and long-established policy. The Patent Office and the courts have recognized a distinction between abandonment of an invention and abandonment of an application. In the effort to secure to an inventor his right to a patent, an act or omission which caused abandonment of an application has not been extended to effect abandonment of the invention unless some positive provision of the statute requires it. As the Court of Appeals of the 7th Circuit, speaking by Chief Justice Fuller in *Western Electric Co. v. Sperry Electric Co.*, 58 Fed. Rep. 186, said (p. 191):

“There is a material difference between the abandonment of an invention and the abandonment of an application for letters patent thereon by failure to comply with section 4894 of the Revised Statutes. The first gives the invention to the public, and, once done, the act is irretrievable; but, besides the power conferred upon the Commissioner of Patents to relieve an applicant from an abandonment of his application under the statute, an application, which has lapsed, or been rejected or withdrawn, may be renewed or repeated so long, we suppose, as the invention itself has not been abandoned by reason of a two-years public use or otherwise.”

See also

*Hayes-Young Tie Plate Co. v. St. Louis
Transit Co.*, 137 Fed. Rep. 82,

in which many authorities are cited.

The two-year rule would reverse this policy and would effect an abandonment of the invention although the application had been properly filed and kept alive by diligent prosecution.

The Amicus Curiae therefore very respectfully, but most earnestly, urges the rejection of any rule for a fixed period within which an applicant may copy claims from a patent for purposes of interference, and urges the adoption of a rule requiring that he must do so only within a reasonable time under all the circumstances of the particular case.

Very respectfully,

EDWIN J. PRINDLE,
as Amicus Curiae.

New York City, Feb. 15th, 1924.

DEPARTMENT OF THE INTERIOR
UNITED STATES PATENT OFFICE

WASHINGTON, D. C.

February 5, 1924.

E. J. PRINDLE, Esq.,
111 Broadway,
New York City.

My dear Mr. Prindle:

I am in receipt of your telegram asking me to give you figures as to delayed cases at the time Commissioner Ewing started his campaign to reduce the number of old cases on hand. Accordingly I am enclosing a copy of Commissioner Ewing's report for the calendar year 1914—see page 8. From this you will see that on January 15, 1914, there were 84 cases pending longer than 15 years (whereas there are now only 36); that on January 1, 1912, there were 289 applications pending longer than 10 years (whereas there are now 85); that on June 1, 1914, there were 799 cases pending longer than 8 years (whereas there are now only 192); and that on January 1, 1912, there were 4296 cases pending longer than 5 years (whereas there are now only 1599). I have purposely picked out the high spots in former years as a basis of comparison but you can ascertain the others from the report above referred to.

One interesting fact has developed regarding those cases *now* pending more than 15 years. While there are 36, they are all pending in one division—the division having charge of automatic telephones.

Each one of these 36 automatic telephone applications has been involved in and delayed by interference proceedings. Outside of these cases in this one division, there is not one application in the office which has been pending more than 15 years.

It is estimated that there are now on hand about 225,000 pending applications of which 63,535 are awaiting official action.

Yours very truly,

(Sgd.) THOMAS E. ROBERTSON,
Commissioner.

Seal of
United States
Department
of
Agriculture

DEPARTMENT OF AGRICULTURE

WASHINGTON

February 8, 1924.

MR. EDWIN J. PRINDLE,
111 Broadway,
New York, N. Y.

Dear Mr. Prindle:

Your letter dated January 30, in which you ask for data on the effect that labor-saving machinery has had on the American farmers' ability to produce crops, has been received.

The amount of machinery in use per farm worker or per farm varies greatly in different parts of the United States. However, the following table shows in a general way the effect that the use of farm machinery has had on the man labor required, per crop-acre, for a number of crops:

Hours of Labor Required per
Acre of Crops by various Methods

| Crop | <i>Manual</i> Back Method | Present Average Practice for U. S. | Average Practice in areas where most ma- chinery is used |
|--------------------------|------------------------------|---|---|
| | Hours | Hours | Hours |
| Barley | 63.5 | 12.3 | 5.0 |
| Corn—Cut up | 182.7 | 52.6 | |
| Corn—Husked in field.... | 38.7 | 18.9 | 14.5 |
| Cotton | 167.8 | 105.0 | 56.0 |
| Timothy Hay | 35.5 | 8.1 | 7.5 |
| Oats | 66.3 | 13.4 | 5.6 |
| Rice | 62.1 | 39.3 | 35.0 |
| Rye | 63.0 | 17.1 | 10.2 |
| Wheat | 61.1 | 10.0 | 5.8 |

I am enclosing two charts which show graphically the effect that the use of machinery has upon crop production.

Very truly yours,

(Sgd.) HOWARD M. GORE,
Acting Secretary.

Enclosures

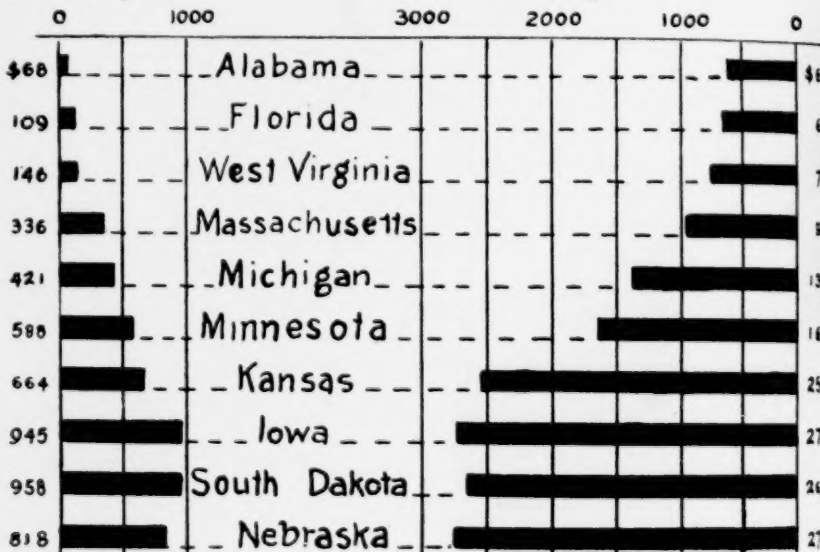
U. S. DEPT. OF AGRICULTURE

BUREAU OF PUBLIC ROADS

Relation Between
 INVESTMENT IN FARM MACHINERY
 and
 VALUE OF ALL CROPS
 PER PERSON ENGAGED IN AGRICULTURE
 1920 Census 1921 Year book, U. S. D. A.

Machinery

All Crops



U. S. DEPT. OF AGRICULTURE

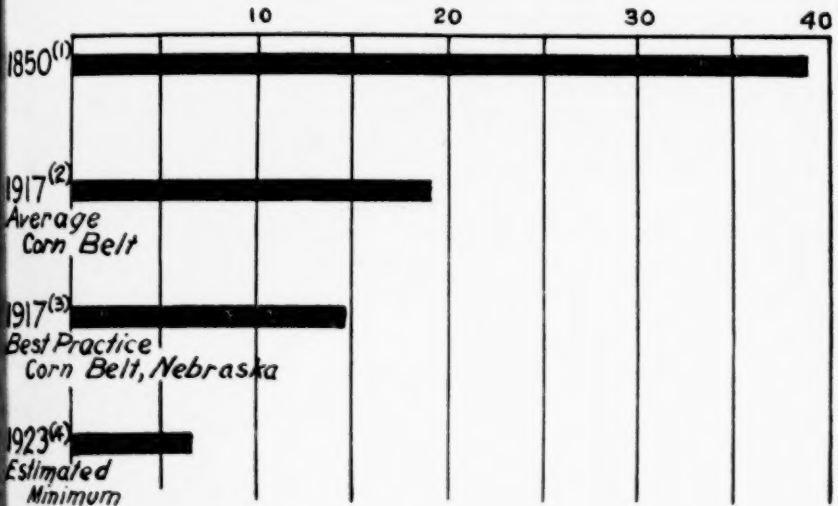
BUREAU OF PUBLIC ROADS

LABOR REQUIRED PER ACRE

for

PRODUCTION OF CORN

Number of Hours



(1) Thirteenth Annual Report, U. S. Department of Labor.

(2) 1921 Year book U. S. Dept. of Agriculture, page 191.

(3) 1921 Year book U. S. Dept. of Agriculture, page 191.

(4) Estimate based on the use of most modern equipment.

POSTAL TELEGRAPH COMPANY

February 21, 1924.

Campbell Farming Corporation,
Hardin, Montana.

Am conducting campaign to secure for Patent Office men, facilities and money necessary to enable it to work efficiently, and wish to show how American inventor has enabled American farmer to displace hand labor with machinery. Will Mr. Thomas Campbell or one of his staff please telegraph me, one eleven Broadway, New York, collect, number of acres in your immense farm and approximate number of men employed upon it.

Edwin J. Prindle.

WESTERN UNION TELEGRAPH COMPANY

February 26, 1924.

Hardin Mont.

Edwin J. Prindle

111 Broadway, New York, N. Y.

APPROXIMATELY SEVENTY FIVE THOUSAND
ACRES IN OUR FARM FOR THIS YEAR AND WE
EMPLOY APPROXIMATELY THREE HUNDRED
MEN IN SUMMER EXCLUSIVE OF MANAGERS
AND FOREMEN.

CAMPBELL FARMING CORPN.

Opinion of the Court.

WEBSTER ELECTRIC COMPANY v. SPLITDORF
ELECTRICAL COMPANY.

CERTIORARI TO THE CIRCUIT COURT OF APPEALS FOR THE
SEVENTH CIRCUIT.

No. 93. Argued March 6, 7, 1924.—Decided April 7, 1924.

1. Upon a review by certiorari, the Court is not called upon to consider questions not raised by the petition for the writ. P. 464.
 2. Claims 7 and 8 of Patent No. 1,280,105, issued to Kane, September 24, 1918, for a rigid unitary and integral support for mounting parts of an electrical ignition device, *held* void because of laches in presenting them to the Patent Office. P. 465.
 3. The rule that a reissue patent, expanding the patentee's original claims, will be invalidated by a delay of two years in applying for it unless special circumstances be proven justifying a longer delay, is applicable also to patents issued on divisional applications. *Chapman v. Wintroath*, 252 U. S. 126, explained. P. 469.
- 283 Fed. 83, affirmed.

CERTIORARI to a decree of the Circuit Court of Appeals, in a patent infringement suit, reversing the District Court and directing dismissal of the bill.

Mr. Albert G. McCaleb and *Mr. Lynn A. Williams* for petitioner.

Mr. Charles L. Sturtevant, with whom *Mr. Eugene G. Mason*, *Mr. David B. Gann* and *Mr. Ballard Moore* were on the brief, for respondent.

Mr. Edwin J. Prindle, by leave of Court, filed a brief as *amicus curiae*.

MR. JUSTICE SUTHERLAND delivered the opinion of the Court.

This writ brings up for review the decree of the court below in a patent suit, 283 Fed. 83, reversing a decree of the Federal District Court for the Northern District

of Illinois, 255 Fed. 907, and directing a dismissal of the bill. Three patents were involved. The decision in respect of two of them turned upon the question whether a license contract between the patentees, Henry and Emil Podlesak, and petitioner, had the effect of precluding an assignment of patent rights made by the Podlesaks to respondent. But the petition upon which the writ was granted challenged the decision below only in respect of the third patent; and we are not called upon to consider the contentions now advanced as to the others. *Alice State Bank v. Houston Pasture Co.*, 247 U. S. 240, 242.

The bill alleges that the Splitdorf Electrical Company had infringed claims 7 and 8 of Kane patent No. 1,280,105, issued September 24, 1918, for a rigid unitary and integral support for mounting the various parts of an electrical ignition device. The original application was filed by Kane February 2, 1910, on which patent No. 1,204,573 was granted November 14, 1916. On October 24, 1914, Kane endeavored to amend his application by introducing six claims copied from Milton's patent, issued May 12, 1914, for the purpose of securing an interference. The amendment was refused and Kane was directed by the examiner to file a divisional application if he desired to contest an interference with Milton. This was done. The Webster Company, however, acquired the rights of both Milton and Kane and through their attorneys conducted the proceedings for both sides in the Patent Office, resulting in an award of priority in favor of Kane.

Subsequently, in 1915, Kane filed a divisional application, presenting nine additional claims, copied from Podlesaks' patent No. 1,055,076, issued March 4, 1913, and re-issue patent No. 13,878, dated February 9, 1915; all of which claims were ultimately decided in favor of the Podlesaks. Thereafter, on June 17, 1918, an amendment was filed embracing the new and broader claims here in question, which were allowed upon an ex parte showing and,

as already stated, patent issued September 24, 1918, to the petitioner, to whom all rights had been assigned. The original bill was filed in 1915; and claims 7 and 8 were brought into the suit by a supplemental bill filed October 25, 1918.

It will thus be seen that claims 7 and 8 were for the first time presented to the Patent Office, by an amendment to a divisional application eight years and four months after the filing of the original application, five years after the date of the original Podlesak patent, disclosing the subject matter, and three years after the commencement of the present suit. A comparison of these claims, as set forth in the patent, with the claims in the original application, to say the least, leaves in doubt the question whether they were not so materially enlarged as to preclude their allowance on the original application. *Railway Co. v. Sayles*, 97 U. S. 554, 563; *Hobbs v. Beach*, 180 U. S. 383, 396; *Dunham v. Dennison Manufacturing Co.*, 154 U. S. 103, 110; *Michigan Cent. R. Co. v. Consolidated Car-Heating Co.*, 67 Fed. 121, 126. But this aside, the evidence establishes to our satisfaction that Kane did not originally intend to assert these amended claims, because he considered their subject matter one merely of design and not of invention; and the inference is fully warranted that the intention to do so was not entertained prior to 1918. During all of this time their subject matter was disclosed and in general use; and Kane and his assignee, so far as claims 7 and 8 are concerned, simply stood by and awaited developments. We are not here dealing, therefore, with the simple case of a division of a single application for several independent inventions, Patent Office Rules 41 and 42; *Bennet v. Fowler*, 8 Wall. 445, 448; *American Laundry Machinery Co. v. Prosperity Co., Inc.*, 295 Fed. 819, but with a case of unreasonable delay and neglect on the part of the applicant and his assignee in bringing forward claims broader than those

originally sought. The repeated assertion of interferences in narrower terms, resulting in delays incident to their determination, affords no just excuse for the failure to assert the broader claims, 7 and 8, at an earlier date. The subject matter of these claims is not of such complicated character that it might not have been readily described in the original application or in one of the subsequent applications—in 1915, for example,—as it was described in 1918; and the long delay of Kane and his assignee in coming to the point tends strongly to confirm the view that the final determination to do so was an exigent afterthought, rather than a logical development of the original application. We have no hesitation in saying that the delay was unreasonable, and, under the circumstances shown by the record, constitutes laches, by which the petitioner lost whatever rights it might otherwise have been entitled to.

We do not overlook the importance of not applying so narrowly the patent law as to discourage the inventor from exercising his creative genius, or the manufacturer or capitalist from assisting in the necessary work of bringing the invention into beneficial use; but it is no less important that the law shall not be so loosely construed and enforced as to subvert its limitations, and bring about an undue extension of the patent monopoly against private and public rights. In suits to enforce reissue patents, the settled rule of this Court is that a delay for two years or more will “invalidate the reissue, unless the delay is accounted for and excused by special circumstances, which show it to have been not unreasonable.” *Wollensak v. Reiher*, 115 U. S. 96, 101. In that case it appeared that the reissue patent was issued to complainant December 26, 1882, upon the surrender of the original patent of March 10, 1874. The Patent Office decided that because of special circumstances the applicant was not guilty of laches; but this Court held otherwise. The claims alleged

to have been infringed were expansions of the original claims as embraced within the invention set forth in the original patent. This Court (pp. 99-100) said:

"It follows from this, that if, at the date of the issue of the original patent, the patentee had been conscious of the nature and extent of his invention, an inspection of the patent, when issued, and an examination of its terms, made with that reasonable degree of care which is habitual to and expected of men, in the management of their own interests, in the ordinary affairs of life, would have immediately informed him that the patent had failed fully to cover the area of his invention. And this must be deemed to be notice to him of the fact, for the law imputes knowledge when opportunity and interest, combined with reasonable care, would necessarily impart it.

"Not to improve such opportunity, under the stimulus of self-interest, with reasonable diligence, constitutes laches which in equity disables the party, who seeks to revive a right which he has allowed to lie unclaimed, from enforcing it to the detriment of those who have, in consequence, been led to act as though it were abandoned.

"This general doctrine of equity was applied with great distinctness to the correction of alleged mistakes in patents, by reissues, in the case of *Miller v. Brass Company*, 104 U. S. 350. It was there declared, that where the mistake suggested was merely that the claim was not as broad as it might have been, it was apparent upon the first inspection of the patent, and, if any correction was desired, it should have been applied for immediately; that the granting of a reissue for such a purpose, after an unreasonable delay, is clearly an abuse of the power to grant reissues, and may justly be declared illegal and void; that, in reference to reissues made for the purpose of enlarging the scope of the patent, the rule of laches should be strictly applied, and no one should be relieved who has

slept upon his rights, and has thus led the public to rely on the implied disclaimer involved in the terms of the original patent; and that when this is a matter apparent on the face of the instrument, upon a mere comparison of the original patent with the reissue, it is competent for the courts to decide whether the delay was unreasonable and whether the reissue was, therefore, contrary to law and void.

"This doctrine has been reiterated in many cases since, and at the present term has been reconsidered and emphatically repeated as the settled law, in the case of *Mahn v. Harwood*, 112 U. S. 354, where it is said, by Mr. Justice Bradley, delivering the opinion of the court: 'We repeat, then, if a patentee has not claimed as much as he is entitled to claim, he is bound to discover the defect in a reasonable time, or he loses all right to a reissue; and if the Commissioner of Patents, after the lapse of such reasonable time, undertakes to grant a reissue for the purpose of correcting the supposed mistake, he exceeds his power, and acts under a mistaken view of the law; and the court, seeing this, has a right, and it is its duty, to declare the reissue *pro tanto* void, in any suit founded upon it.' It was also there said, that, while no invariable rule can be laid down as to what is reasonable time within which the patentee should seek for the correction of a claim which he considers too narrow, a delay of two years, by analogy to the law of public use before an application for a patent, should be construed equally favorable to the public, and that excuse for any longer delay than that should be made manifest by the special circumstances of the case."

In *Ives v. Sargent*, 119 U. S. 652, 661, the duty of the patentee to examine his letters patent within a reasonable time to ascertain whether the latter fully covered his invention was reiterated. And where this was neglected for a period of three years, when, finding the real invention

had been infringed but without infringing the patent as originally granted, an application for a reissue was made and allowed, it was held that the patentee was guilty of laches and the reissue came too late. The doctrine of *Wollensak v. Reiher* was restated (p. 662) to the effect that while no invariable rule can be laid down, a delay of two years, by analogy to the law of public use before an application for a patent, will be fatal unless excuse for a longer delay shall be made manifest by the special circumstances of the case. See also *Topliff v. Topliff*, 145 U. S. 156; *Wollensak v. Sargent*, 151 U. S. 221.

While the analogy between the case of a reissue patent and that of copying for interference is not always an exact one, it is sufficiently so, as applied to the present case, to make these decisions pertinent; and the principle which they announce is controlling. We brought this case here by certiorari because of the claim that the decision of the Court of Appeals rested primarily on *Chapman v. Wintroath*, 252 U. S. 126; and the contention was that the opinion there had been misunderstood and misapplied.¹ The question as thus presented, was important and one which it was thought should be authoritatively determined. The court below finally put its decision substantially on the ground which we have stated as the basis of our conclusion. But before doing so, it said (283 Fed. 93): "Appellants contend, however, and we agree with the courts that have passed upon the question, that the effect of the holding [in the *Wintroath Case*] is to fix the period during which such application must be filed at two years from the date of the issuance of the other patent. No other deduction can fairly or logically be drawn from the discussion of the question in that opinion." But *Chapman v. Wintroath* is not to be so narrowly construed.

¹ See also *American Laundry Machinery Co. v. Prosperity Co., Inc.*, 294 Fed. 144; reversed by a decision of the Circuit Court of Appeals for the Second Circuit, cited *supra*.

The facts of the case were: The Chapmans filed their application in 1909. The invention was a complicated one and the application met with much difficulty in the Patent Office, and, though regularly prosecuted, no patent had been issued in 1915 when the controversy arose. Wintroath filed an application in 1912. His invention was also elaborate and intricate. Twenty months after this latter application, the Chapmans filed a divisional application in which the claims of the Wintroath patent were copied and an interference was declared. The examiner without hearing evidence, entered judgment in favor of Wintroath on the ground that the failure of the Chapmans to present the interference issue for more than a year after the date of the Wintroath patent constituted laches, and that they were estopped. This decision was reversed by the Commissioner of Patents, and his decision, in turn, was reversed by the Court of Appeals of the District of Columbia, that court holding that the one year period should apply, on the ground that the divisional application was to be regarded substantially as an amendment to the parent application, and that it would be inequitable to permit a longer time than that allowed by Rev. Stats. § 4894, for further prosecution of an application after office action. This Court, in reversing the decision of the Court of Appeals, referred to § 4886, as amended, March 3, 1897, c. 391, 29 Stat. 692, and §§ 4887, 4897 and 4920 of the Revised Statutes, all of which contain provisions for a time limit of two years for filing applications, and said (p. 136): "Thus through all of these statutes runs the time limit of two years for the filing of an application, there is no modification in any of them of the like provisions in Rev. Stats. § 4886, as amended, and no distinction is made between an original and a later or a divisional application, with respect to this filing right."

If this were all, it might justify the conclusion that a hard and fast time limit of two years is to be applied in

every case of a divisional application. But a reading of the entire opinion demonstrates that this conclusion is erroneous. The Court proceeds to say that divisional applications are not to be dealt with in a hostile spirit, but are to be "favored to the extent that where an invention clearly disclosed in an application . . . is not claimed therein but is subsequently claimed in another application, the original will be deemed a constructive reduction of the invention to practice and the later one will be given the filing date of the earlier, with all of its priority of right." Reference is made to *Wollensak v. Reiher*, *supra*, and other reissue cases, which, as we have seen, adopt the two-year time limit by analogy to the law of public use before application for patent; and, while it is not said in terms, the plain import of the citation of and reliance upon these cases is that the effect of the two years' delay, as recognized in those cases, may be overcome where it "is accounted for and excused by special circumstances, which show it to have been not unreasonable;" and, properly understood, there is nothing in the opinion to the contrary.

Our conclusion, therefore, is that in cases involving laches, equitable estoppel or intervening private or public rights, the two-year time limit *prima facie* applies to divisional applications and can only be avoided by proof of special circumstances justifying a longer delay. In other words, we follow in that respect the analogy furnished by the patent reissue cases.

Affirmed.